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ABSTRACT

This manual is designed to be used independently by students in secondary health occupations programs or by individuals receiving on-the-job training in a physical therapy department or clinic. A clinical site is needed for individuals to practice physical therapist aide skills and demonstrate mastery of those skills. A glossary appears first. The manual is divided into seven units: explore the field of physical therapy; basic patient care; patient mobility; assisting with treatment; range of motion exercise and ambulation; maintaining treatment areas; and office communication. Units are divided into from one to three lessons, which contain the following: lesson objectives, key terms, content information, illustrations, activity sheets, and clinical/laboratory activity sheets as appropriate for the content. Activity sheets are designed to assist the learner in mastering the information in each lesson. The clinical/laboratory activity sheets should be reviewed or discussed with the instructor or clinical supervisor upon completion. A unit checklist at the end of each unit provides a method for keeping track of activity sheets, clinical/laboratory activity sheets, skill sheets, and written unit evaluations to be completed in the unit. The written unit evaluations that should be taken after all lessons in a unit are studied and skill sheets are included at the end of the manual. A separate instructor's key provides answers to activity sheets and unit evaluations. A competency record for evaluating student achievement of each competency is provided. (YLB)

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Physical Therapist

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Physical Therapist Aide

Student Manual

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Physical Therapist Aide Certificate of Achievement

Acknowledgments

The content of the *Physical Therapist Aide* manual was developed with input from secondary health occupations education instructors, post-secondary physical therapist assistants, physical therapy instructors, physical therapists, and personnel from the Missouri Department of Elementary and Secondary Education and the Instructional Materials Laboratory at the University of Missouri-Columbia. A sincere thank you is extended to advisory committee members for donating their time to this project.

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Foreword

This *Physical Therapist Aide* manual is designed to be used independently by students who are in secondary health occupations programs or by individuals receiving on-the-job training in a physical therapy department or clinic. A clinical site (physical therapy department or clinic) is needed for individuals to practice physical therapist aide skills and to demonstrate mastery of those skills.

This manual is divided into seven units: Explore the Field of Physical Therapy, Basic Patient Care, Patient Mobility, Assisting with Treatment, ROM Exercise and Ambulation, Maintaining Treatment Areas, and Office Communication. Units are further divided into lessons, which contain lesson objectives, key terms, content information, illustrations, activity sheets, and clinical/laboratory activity sheets as appropriate for the content. Activity Sheets are designed to assist the learner in mastering the information in each lesson. The Clinical/Laboratory Activity Sheets should be reviewed or discussed with the instructor or clinical supervisor upon completion.

Each unit has a written evaluation, which should be taken after all lessons in the unit are studied. A score of at least 80 percent indicates that the student has satisfactorily completed the unit and may proceed to the next unit. Students should review any lessons or materials that correspond to missed evaluation questions because all information presented is important for success as a physical therapist aide. Skill Sheets provide a record for mastery of the steps of procedure for each skill. The learner should practice the skills outlined in the lessons before requesting evaluation of the skills. Not all lessons contain Skill Sheets. Your clinical supervisor will be evaluating mastery of the skills.

A Unit Checklist, located at the end of each unit, provides a method for keeping track of Activity Sheets, Clinical/Laboratory Activity Sheets, Skill Sheets, and Written Unit Evaluations to be completed in the unit.

The Written Unit Evaluations and Skill Sheets are included at the end of the manual. If you are taking this instruction under the supervision of an instructor or clinical supervisor, these pages may have removed from your manual. When you are ready to complete a Written Unit Evaluation or a Skill Sheet, check with your instructor or clinical supervisor.

Those using this manual on an individual basis may want to order the Instructor's Key, which provides answers to Activity Sheets and Unit Evaluations.

Prior to beginning this manual, the student should successfully master all competencies in the Health Care Assistant Core Curriculum. The Core Curriculum is designed to teach information and skills common to all health care workers.

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Glossary

A

Abduction - movement away from the midline of the body

Active ROM - range of motion exercises in which the patient needs only oral instructions from the caregiver

Active-assisted transfer - a dependent transfer in which the patient is able to help

Active-assistive ROM - range of motion exercises in which patients can help with movement, but they need some assistance from the caregiver

Adduction - movement toward the midline of the body

Ambulation - walking practice that reinforces the skills the patient has learned during gait training

B

Body mechanics - effective use of the body to move objects or people without causing injury

C

Colostomy bag - a bag worn by a patient who has had surgical removal of part of the intestine. The colostomy bag is attached to the body over the surgical opening, and the patient's bowel content empties into it.

Confidentiality - keeping patient information private; discussing patient information only with those health care team members who are directly responsible for that patient's care

Contact assistance - the direct hand or other body contact given the patient by the caregiver during ambulation and other movement activities

D

Debridement - the removal of dead tissue

Dependent transfer - a transfer that requires a caregiver's assistance

Diagnosis - the specific medical problem that affects a patient as determined by a physician

Diathermy - a form of deep heat that uses electromagnetic energy in a way similar to a kitchen microwave

Dorsiflexion - bending the ankle joint, moving the foot and toes up toward the body

Drape - the covering placed over the patient to expose the part of the body to be treated

E

Electric wheelchair - a wheelchair with a battery and motor

Electrotherapy - as used in physical therapy, it is the use of electrical impulses to relieve pain and to stimulate muscles and nerves

Empathy - the ability to understand and be aware of another person's feelings

Ethics - a set of principles for moral conduct and judgment

Eversion - outward movement of the sole of the foot

Extension - straightening a joint

F

Flexion - bending a joint

Fluidotherapy™ - a device with a chamber filled with warm air and circulating ground corncobs. The physical therapy patient places his or her arm or leg inside the chamber to receive a gentle massage and heat treatment.

Full weight bearing - able to place entire weight of body on an extremity, usually a leg

G

Gait training - the process of teaching the patient to walk

Gastrostomy tube (G tube) - a catheter that is surgically placed in a patient's stomach through the abdominal wall, usually for patients who cannot eat or drink normally

Gurney - a stretcher on wheels

H

Health care team - a group of people who have joined to shelter, diagnose, plan, care for, and rehabilitate individuals who are ill or injured

Hot pack - a quilted, canvas sack filled with a sandy, gel-like mixture that holds heat for a long time

Hydrotherapy - the use of water in treatments; includes the use of various sizes of whirlpools for the arm, leg, or full body

I

I&O (Intake and Output) - all fluids (liquids and solids that become liquid at room temperature) taken into the body and all fluids (urine, emesis, bleeding, diarrhea, and excessive sweating) that are eliminated

Ice massage - a massage using ice frozen in small paper cups

Ice pack - a sandy, gel-like material inside of a plastic cover that is available in various shapes and sizes; used to cool areas that are inflamed, painful, and/or swollen

Independent transfer - a transfer that can be accomplished by the patient without any direct assistance from a caregiver

Infiltration - a situation in which the IV fluid does not enter the vein, but is infused in the tissues near the insertion site instead

Informed consent - agreement given by the patient or the patient's family for treatment after being informed of what is happening and why

Inpatients - people hospitalized because of illness or injury requiring round-the-clock care

Intravenous (IV) line - a mechanism consisting of a needle inserted in a vein, a plastic tube that goes from the needle to a fluid container, a drip chamber where the flow of liquid can be monitored, a small valve on the tube that controls the drip, the fluid container, and a IV pole. It allows fluids to enter the body through the veins, and it may be controlled by a small computer.

Inversion - inward movement of the sole of the foot

L

Lateral rotation - turning an extremity outward

M

Manual wheelchair - a wheelchair operated by hand

Material Safety Data Sheet (MSDS) - a document that covers in detail (1) what a chemical product is made of, (2) what physical harm it can cause, (3) precautions to take to prevent injury, (4) what steps to take in case of accident, and (5) who to call in case of questions or an accident. The MSDS must be must be posted in the place where the particular chemical will be used.

Maximal assistance - the amount of assistance required by a patient who is very weak

Mechanical lift - a hydraulic lift that allows one or two caregivers to transfer a dependent patient with relatively little effort

Mechanical traction - the use of a device to stretch various parts of the body

Medial rotation - turning an extremity inward

Modalities - any physical agent applied to produce therapeutic changes to biological tissue; includes but not limited to thermal, acoustic, light, mechanical, or electrical energy

Motor deficit - the loss of movement due to an injury or disease affecting the nervous system

N

Nasal cannula or oxygen mask - a cannula or mask through which a patient breathes humidified oxygen

Nasogastric tube (NG tube) - the tube used to feed the patient a liquid diet, usually taped at the patient's nose where it enters the body and goes to the stomach. It can also be attached to suction to remove drainage from the stomach.

Nonweightbearing - able to place no weight on an extremity

O

Optimum function - the ability to perform the most that can be expected of an individual

Organizational chart - a chart that shows how the people who make up the health care team are divided into departments

Outpatients - people who come for treatment or return for further care after they are discharged from the hospital

P

Paraffin bath - a treatment commonly used for patients with arthritic hands; paraffin is melted with oil in a small tub, and the patient immerses his or hands in the tub for treatment.

Partial weight bearing - able to place a portion of the body weight on an extremity; often expressed as a percentage of body weight

Passive ROM - range of motion exercises in which the patient is relaxed and the caregiver moves the joints through the exercises without help from the patient

Passive-assisted transfer - a transfer that occurs when the patient is completely dependent on others to do the work

Physical therapist - therapist who evaluates, develops treatment plans, treats, determines equipment needs, and prepares discharge plans for physical therapy patients. The physical therapist is responsible for documentation and communication with the patient's other caregivers.

Physical therapist aide - individual who sets up and puts away equipment, restocks supplies, and generally keeps the physical therapy department in order. The aide may also help the patient get ready for treatment or assist the patient in performing an activity.

Physical therapist assistant - individual who carries out much of the direct physical therapy patient care, such as exercise, operating physical therapy equipment, fitting assisting devices, documentation, and communicating with other caregivers, including delegating to the physical therapist aide. The assistant does not evaluate patients or develop treatment and discharge plans.

Physical therapy - a health field that is responsible for assisting patients to reach the highest level of functional mobility in order for them to lead satisfying and productive lives

Plantar flexion - straightening the ankle joint, moving the foot and toes down and away from the body

Privacy - being away from other people's company or observation

Pronation - to turn down

Prone - lying face down

R

Range of motion (ROM) exercises- moving the joints through as much of their normal range as possible

Resistive ROM exercises - range of motion exercises in which the caregiver or use of equipment applies a force to make the patient work harder

Restraint - anything used to prevent a patient from causing injury to himself or herself and that cannot be removed by the patient

S

Sensory deficit - inability or decreased ability of the special senses, including vision, hearing, touch, taste, or smell

Side-lying - lying on one's side

Standby assistance - during ambulation and other activities, the caregiver is close to the patient, but makes no direct hand contact

Supination - to turn up

Supine - lying on the back

Sympathy - feeling sorry for someone

T

Terminal illness - an advanced stage of a disease that has an unfavorable prognosis and no known cure

Toe or touch weight bearing - able to touch the toe or sole of foot lightly to the floor for balance

Transfer - the act of moving a patient from one place to another

Transfer (gait) belt - a thick belt placed around the patient's waist that is used by the caregiver to assist in moving, transferring, or ambulating the patient

Transfer sheet - also known as a lift sheet, it is a second sheet placed under the patient's body to help change the patient's position on the bed, treatment table, or mat

U

Ultrasound - very high frequency sound waves that are beyond the range of human ears; the waves are used in physical therapy to produce heat for treatment

Urinary catheter - a tube placed into the urinary bladder through the urethra (from the body opening to the bladder). One end of the catheter has a small balloon device to keep it in place in the bladder, the other end is attached to a collection bag.

W

Wound drainage tube - a drain tube placed in a wound

Unit I

Explore the Field of Physical Therapy

Physical therapy has been practiced in the United States since the early 1920s and is an important part of the medical health care system. In this introduction to the field of physical therapy, you will learn a little of the history of physical therapy, the professionals associated with physical therapy, the common employment settings of physical therapy, and the types of patients who come to physical therapy.

Unit Lesson

Explore the Field of Physical Therapy

Lesson 1:
Explore the Field of Physical Therapy

Objectives:

A. Identify major events in the field of physical therapy.

B. List common employment sites and settings.

C. Identify roles of physical therapy team members (include education for each member).

D. Describe relationships between physical therapy and other health team members.

E. Follow chain of command.

F. Identify common conditions and impairments requiring physical therapy.

Key Terms:

- Physical therapy
- Inpatients
- Outpatients
- Physical therapist
- Physical therapist assistant
- Physical therapist aide
- Health care team
- Organizational chart

The sun's heat, water from warm springs, massage, and even snow have been used to relieve pain since ancient times. Such a relief of pain helps people move more easily.

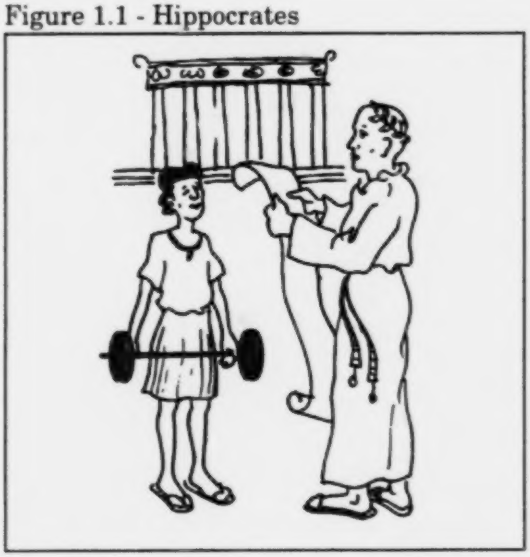
When you stretch a stiff joint, exercise to make a weak muscle stronger, or use heat to ease sore muscles, you are, in a way, using physical therapy. People have been using this kind of "physical therapy" for thousands of years.

Major Events in the Field of Physical Therapy

The first information about exercise was in a Chinese book called the *Cong Fou*, written nearly three thousand years ago.

Hippocrates, a Greek physician in 377 B.C., advised sick people to exercise as soon as they were able.

Figure 1.1 - Hippocrates

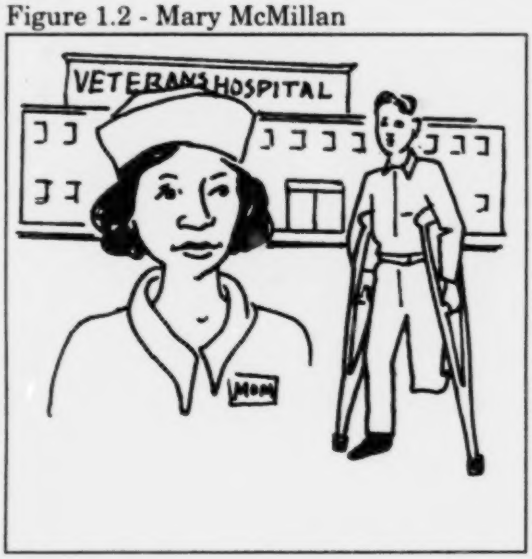


Barbers had the sharpest tools and were sometimes called upon to be surgeons. One of them, Ambrose Paré, discovered that his "patients" improved faster if they started walking as soon as they were able. Exercise to help people get well faster has been around a long time.

During World War I, a woman named Mary McMillan trained many women to rehabilitate injured veterans who had amputations and other war wounds

(Figure 1.2). After the war she became known as the "Mother of Physical Therapy." She started the American Women's Therapeutic Association. Later, the name was changed to the American Physical Therapy Association when both men and women became physical therapists. The group continues to represent physical therapists in the United States.

Figure 1.2 - Mary McMillan



After World War I there were several severe outbreaks of polio. Because many children were paralyzed by polio, many people were trained as "physiotherapists" to help the children--and adults--learn to move again. This was the beginning of physical therapy in the United States.

Physical therapy is a health field that is responsible for assisting patients to reach their highest level of functional mobility in order for patients to have satisfying and productive lives. Physical therapy is particularly concerned with teaching exercise for strength, flexibility, and endurance. Physical devices such as heating pads are sometimes used to relieve pain and improve flexibility to make exercise easier. For a more precise definition of physical therapy, see Figure 1.4

Common Employment Sites

The number of settings where physical therapy is provided continues to expand. The hospital clinic was once the most common site, but now physical therapy is provided in many settings. These include

Figure 1.3 - Major People and Events in Physical Therapy

Date	The People	The Events
1000 B.C.	Chinese priests	Wrote *Cong Fou* exercise book.
450 B.C.	Hippocrates, Greece	Advised exercise after illness.
1600 A.D.	"Barber-Surgeons," France	Advised exercise after broken bones were healed.
1918-1921	Mary McMillan, United States	Became the "Mother of Physical Therapy" because she helped start programs for physiotherapists and founded the American Women's Therapeutic Association

Figure 1.4 - Physical Therapy Definition

Physical Therapy is:

"The assessment, evaluation, treatment, and prevention of physical disability, movement dysfunction and pain resulting from injury, disease, disability, or other health-related conditions.

"Physical therapy includes: the performance and interpretation of tests and measurements of body systems to assess pathophysiological, pathomechanical, electrophysiological, ergonomic, and developmental deficits of body systems to determine diagnosis, treatment, prognosis, and prevention."

"Physical therapy also requires planning, administration, and modification of therapeutic interventions that focus on posture, locomotion, strength, endurance, cardiopulmonary function, balance, coordination, peripheral or spinal joint mobility, flexibility, pain, healing and repair, and functional abilities in daily living skills, including work."

American Physical Therapy Association, 1993

Figure 1.5 - Common Employment Sites

Setting	Common Patient Type
General Hospitals	People with serious illnesses or injuries; people who return for treatment after discharge from the hospital; many have joint problems such as sports injuries
Rehabilitation Hospitals	Persons with disabilities who are trained to return home
Outpatient Clinics	All kinds of patients; many have orthopedic injuries such as sports injuries
Long-term Care Facilities	Persons who are elderly and disabled
Patients' Homes	People recently discharged from hospitals, particularly persons who are elderly and children

general hospitals, rehabilitation hospitals, outpatient clinics, long-term care facilities, and patients' homes (Figure 1.5).

General hospitals - Two categories of patients are seen in hospital physical therapy clinics:

a. **Inpatients** are people who are hospitalized because they are ill or injured and need round-the-clock care.

b. **Outpatients** are people who come for treatment or return for further care after they are discharged from the hospital. Many have joint (orthopedic) problems such as sports injuries.

Rehabilitation hospitals - Persons in rehabilitation hospitals need several days or weeks of physical therapy to reach maximum ability. Special equipment and training are often required before they are discharged to go home or back to work.

Outpatient clinics - These clinics are often separate from the hospital and may be privately owned by a physical therapist. All kinds of patients are seen, many of whom have bone and joint (orthopedic) problems such as sports injuries.

Long-term care facilities - Physical therapy in long-term care primarily helps persons who are elderly and disabled to reach their maximum ability to take care of themselves.

Patients' homes - People receiving physical therapy at their homes have recently been discharged from the hospital. Many patients are elderly or children.

Physical Therapy Team Members

All physical therapy team members are important in providing the best possible care for patients. There are many different levels of skill required for efficient patient care. Each team member must learn the responsibilities and limitations of his or her job and how to relate to the other team members. Some team members and the type of education required for each appear in Figure 1.6.

The physical therapist assistant (PTA) and the physical therapist aide (PT aide) both work under the direction of the physical therapist (PT).

The physical therapist is legally responsible for the patient's physical therapy care plan. The assistant and aide should never vary from the care plan without permission from the therapist.

If the aide is uncertain about something in the plan, it must be discussed with the therapist or assistant.

The **physical therapist** is the department administrator and evaluates, develops treatment plans, treats, determines equipment needs, and prepares discharge plans for patients. The therapist is responsible for documentation and communication with the patient's other caregivers.

The **physical therapist assistant** works only under the direction of the therapist and carries out much of the direct patient care. This includes exercise, operating physical therapy equipment, fitting assisting devices, documentation, and communicating with other caregivers including delegating to the aide. The assistant does not evaluate patients or develop treatment and discharge plans.

Figure 1.6 - The Physical Therapy Team

Occupational Title	Education	Abbreviation
Physical Therapist	4 to 6 years of college	PT
Physical Therapist Assistant	2 years of college	PTA
Physical Therapist Aide	A high school diploma	PT Aide

The **physical therapist aide** works only under the direction of either the therapist or the assistant. The aide sets up and puts away equipment, restocks supplies, and generally keeps the department in order. The aide may also help the patient get ready for treatment or assist the patient in performing an activity. For example, a patient may need help with clothing or in practicing ambulatory skills. Often the aide will assist the therapist or assistant in treating patients.

The routine responsibilities of the aide in the clinic should be written out in a departmental policies and procedures manual. These duties should be reviewed from time to time by the supervisor and other staff members. In this way, everyone in the clinic will know the specific duties and responsibilities of each member of the health care team.

When more than one physical therapist aide is employed in a clinic, specific jobs may be assigned so that special skills may be developed over time. For example, one aide may develop expertise in the hydrotherapy area and another in the gymnasium.

The routine in every physical therapy clinic will vary depending on the types of patients seen, the makeup of the staff, and the special skills of the physical therapy team members. It may be helpful to see what the various responsibilities of the physical therapist aide might be throughout the day (Figure 1.7).

Figure 1.7 - Sample Day for a Physical Therapist Aide

8:00 -8:15 a.m.	1.	Put clean pillowcases on all pillows.
	2.	Put clean sheets on all treatment tables.
	3.	Restock linens and supplies, such as disposable gloves, tissues, and paper cups and see that they are easily available.
	4.	Check patient assignments for the day.
8:15 a.m. -12:00 p.m.	1.	Count supplies in the storeroom and cabinets.
	2.	Order supplies as needed (lotion, powder, paper towels, cups, etc.).
	3.	Replace linens on pillows and treatment tables as needed.
	4.	Maintain department neatness by placing used linen in a hamper. Discard used supplies, such as cups, tissues, gloves.
	5.	Put equipment away after use.
	6.	Assist in patient treatment as assigned (gym, treatment booth, etc.).
1:00 -4:00 p.m.	1.	Maintain department neatness.
	2.	Assist in patient treatment as assigned.
	3.	Inventory linens (sheets, towels, bath blankets, washcloths, etc.).
4:00 -5:00 p.m.	1.	Clean and disinfect equipment, mats, treatment tables and other surfaces that have been used by patients.
	2.	Order linens.
	3.	Perform routine maintenance tasks scheduled by the week or month (drain, clean, and refill hot pack machine and paraffin bath, and clean and dust racks and shelves that are not routinely cleaned by the housekeeping staff, etc.).

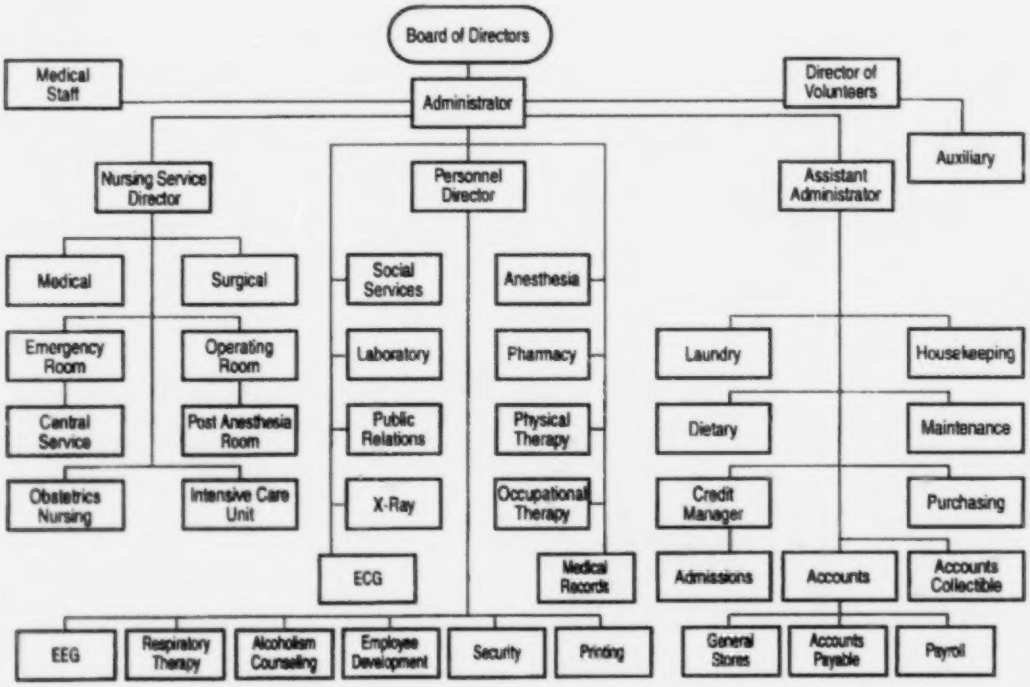
The Health Care Team

The expression **health care team** refers to the group of people who have joined to shelter, diagnose, plan, care for, and rehabilitate individuals who are ill or injured. The **organizational chart** shown in Figure 1.8 shows how people who make up the health care team are divided into a large number of departments. The types of departments will vary depending on the health care setting and the needs of the patient population. A large facility will have many employees in each department; a smaller facility may have only one person in some units. A private outpatient clinic may only have physical therapy personnel.

The health care team includes a board of directors who hires an administrator. The administrator is responsible for all aspects of the operation of a facility such as a hospital or nursing home. Along with the administrative staff, the administrator manages the day-to-day operation of the facility. Administrators have little direct contact with patients.

Those who have direct contact with patients include physicians, registered nurses (RNs), licensed practical nurses (LPNs), nursing technicians, and nurse assistants. Personnel who provide rehabilitation include the physical therapy staff, occupational therapy staff, speech pathologist, audiologist, recreational therapist, and special educators. Other people who work directly with patients include social workers, respiratory therapists, dietary staff, pharmacy personnel, x-ray personnel, physician's assistants, admissions personnel, and chaplains or counselors.

Figure 1.8 - The Organization Chart



Board of Directors
Medical Staff
Administrator
Director of Volunteers
Auxiliary
Nursing Service Director
Personnel Director
Assistant Administrator
Medical
Surgical
Social Services
Anesthesia
Emergency Room
Operating Room
Laboratory
Pharmacy
Laundry
Housekeeping
Central Service
Post Anesthesia Room
Public Relations
Physical Therapy
Dietary
Maintenance
Obstetrics Nursing
Intensive Care Unit
X-Ray
Occupational Therapy
Credit Manager
Purchasing
ECG
Medical Records
Admissions
Accounts
Accounts Collectible
EEG
Respiratory Therapy
Alcoholism Counseling
Employee Development
Security
Printing
General Stores
Accounts Payable
Payroll

Housekeeping, laundry, and plant engineering staff are also necessary to keep a facility running smoothly. Personnel who provide supportive services but have little direct contact with patients include those in medical records, business services, and human resources or personnel.

The physical therapy staff members interact with employees in nearly every department of a hospital at some time. For example, when the physical therapy department needs clean towels, sheets, and pillowcases, the aide may call the laundry to order what is needed.

The Chain of Command

The organizational chart in Figure 1.8 also shows the chain of command or line of authority between departments in the facility. Note the lines that run from the administrator to all of the departments. This way, departments are organized so that it is clear who is responsible to whom. For example, a physical therapist aide would not be responsible for serving food to the patient; that is the responsibility of someone in the dietary department.

Physicians are nearly always the ones who oversee the patient's plan of care in the hospital, just as the administrator oversees the operation of the facility. The patient's physician will write orders to many different departments in the hospital to be sure all of the patient's needs are met. Each department or unit within the facility has a director or manager who is responsible for its operation. Physical therapy may be a separate department or it may be part of a larger rehabilitation department.

Within a physical therapy department, there is also a chain of command. Frequently, one physical therapist is the department head with all other therapists reporting to him or her. Assistants may be assigned to one therapist or several therapists. Aides may be assigned under one or more therapists or under one or more assistants. It is very important to know to whom you should report.

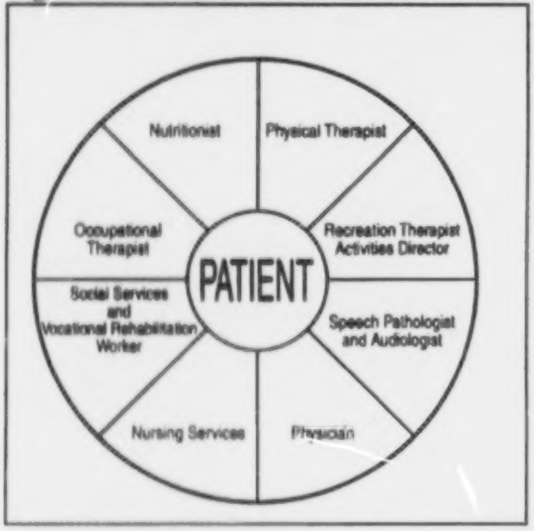
A rehabilitation department usually includes a department manager, physical therapists, occupational therapists, physical and occupational therapist assistants, and aides. There will also be speech therapists, audiologists who work with those who are hard-of-hearing, recreation therapists, learning disabilities specialists, psychologists, and vocational rehabilitation counselors. Prosthetists (artificial limb makers), orthotists (brace makers), athletic trainers, and exercise physiologists may also work in rehabilitation.

A physician is usually the person responsible for coordinating a patient's total care plan. Physical therapists work closely with physicians, and any member of the physical therapy staff may talk with the patient's doctor about the patient. If you do not feel comfortable speaking with the physician, refer the doctor to the supervisor. You should not take orders directly from the physician because any change in the physical therapy care program must be approved by the patient's physical therapist.

The Patient-Centered Rehabilitation Team

Sometimes the term "patient-centered" team is used to describe the group of people working with the patient. This term is especially applicable in the rehabilitation setting because the patient and family know the most about their particular needs. The patient is the center of the team. In this way, caregivers are reminded that their main purpose is to help the patient and

Figure 1.9 - Patient-Centered Health Care


Nutritionist
Physical Therapist
Occupational Therapist
Recreation Therapist Activities Director
PATIENT
Social Services and Vocational Rehabilitation Worker
Speech Pathologist and Audiologist
Nursing Services
Physician

involved as the rehabilitation plan is developed and treatment is carried out. A chart illustrating the relationships among members of a patient-centered rehabilitation team appears in Figure 1.9.

Conditions and Impairments Requiring Physical Therapy

Many types of conditions and impairments require physical therapy. In Figure 1.10, the common ones are grouped by different patient age groups. The physical therapist aide may work with patients with a variety of diagnoses. The aide should treat all patients with respect, dignity, courtesy, and in a professional manner regardless of their diagnoses.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

After you have completed the activity sheets, you may take the written evaluation for this unit. A score of at least 80 percent indicates you may proceed to the next unit.

Figure 1.10 - Common Conditions by Age Group

Children	Teenagers and Young Adults	Middle-Aged Adults	Elderly
Developmental defects: Cerebral palsy Down's syndrome Cystic fibrosis	Trauma - Sports injuries: Fracture Sprain Strain	Trauma - Work injuries: Fracture Sprain Strain	Arthritis Hip fracture Total joint replacements (hip, knee)
Trauma: Burns	Head injury	Lower back pain	
	Spinal injury	Arthritis	Stroke
	Arthritis	Heart disease	Parkinson's disease
	AIDS	Lung disease	

Lesson 1: Explore the Field of Physical Therapy

Activity Sheet

1. What were the two major events that led to the development of physical therapy in the United States?

   a. ______________________________

   b. ______________________________

2. Who is called the "mother of physical therapy?" ______________________________

3. What is the current name of the professional organization representing physical therapists in the United States? ______________________________

4. List five possible physical therapy work settings.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

5. What are the educational requirements for:

   a. Physical therapist aide ______________________________

   b. Physical therapist assistant ______________________________

   c. Physical therapist ______________________________

6. What information can you gather from an organizational chart?

   ____

   ____

7. Who should be at the center of a rehabilitation team?

   ____

8. List six common types of conditions and impairments seen in physical therapy.

a. ______________________ d. ______________________

b. ______________________ e. ______________________

c. ______________________ f. ______________________

9. How do the responsibilities of the aide differ from the responsibilities of the assistant?

____

____

10. What are three tasks that only the physical therapist can do?

a. ____

b. ____

c. ____

11. From whom should the physical therapist aide take direction in the clinic?

____

12. List two examples of when the physical therapy department communicates with other departments?

a. ____

b. ____

Lesson 1: Explore the Field of Physical Therapy

Clinical/Laboratory Activity Sheet

1. Get or draw an organizational chart of your clinical site and write out short answers to the following questions:

   a. What other departments are closely aligned with the physical therapy department? Why do you think the organization was designed this way?

   b. List the people and organizational titles in the line of authority for the physical therapist at your clinical site.

2. Compare organizations with other members of your class. Look at each other's charts. What are the pros and cons of each type of organization? How would you design or realign the organization? If there are no other physical therapist aide students, discuss your findings with your classroom instructor.

Unit Checklist

Student Name ______________________ Overall Unit Rating ________

Activity Sheet: Explore the Field of Physical Therapy Rating ________

Comments: ______________________

____

____

Clinical/Laboratory Activity Sheet: Explore the Field of Physical Therapy Rating ________

Comments: ______________________

____

____

Written Unit Evaluation Score ________

Additional Comments: ______________________

____

____

Teacher Signature ______________________ Date ______________________

Student Signature ______________________ Date ______________________

Unit II

Basic Patient Care

The physical therapist aide must interact with patients in a courteous, caring, respectful, and safe manner. Many physical therapy patients, particularly outpatients who have only a little difficulty getting about, will seldom need more than a smile, a greeting, and some help setting up equipment.

Hospitalized inpatients, on the other hand, often have special needs because they cannot move without assistance. They may also have difficulty communicating and often cannot perform the many daily activities that are normally done without thinking. Furthermore, these patients are frequently burdened with medical equipment that is necessary for their survival and recovery.

Unit II presents basic information about communication and relationships with patients. It explains why confidentiality and privacy are important, and why it is important to encourage patients, including children, to learn to help themselves. Some of the medical equipment used in treating patients will also be described.

Unit Lessons

Techniques for Interacting with Patients

Lines, Tubes, Bags, and Wound Dressings

Assisting the Patient with Comfort and Self-Care

Lesson 1:
Techniques for Interacting with Patients

Objectives:

A. Exhibit sensitivity to patient's pain and loss.

B. Identify the main goal of physical therapy.

C. Maintain patient confidentiality.

D. Maintain patient privacy.

E. Differentiate between ethical and unethical decisions and legal and illegal actions.

F. Respond appropriately to physical therapy patients who have sensory deficits.

G. Identify techniques that encourage the cooperation of the pediatric patient.

Key Terms:

- Informed consent
- Diagnosis
- Empathy
- Sympathy
- Terminal illness
- Optimum function
- Confidentiality
- Privacy
- Ethics
- Motor deficit
- Sensory deficit

Working in a hospital or clinic means interacting with people, including patients, families, visitors, and other employees. It is important to treat all people with understanding, care, and compassion. When people are hospitalized, they or their families have the right to maintain control over the treatment they receive. **Informed consent** means that the patient or the patient's family understands what is happening and why. The patient or the family can say "no" if they do not agree or do not understand some part of the care plan. Most facilities have a statement of patient rights that explains the patient's rights and the responsibilities of the health care team to its patients (Figure 1.1).

Figure 1.1 - Patient Bill of Rights

The patient has the right to:

1. Considerate and respectful care.
2. Know the names of the persons giving care.
3. Be informed about all aspects of treatment and consent to treatment.
4. Refuse treatment.
5. Receive an explanation of the medical bill.
6. Know the medical facility rules and regulations.
7. Exercise cultural and spiritual beliefs that do not interfere with others' rights.
8. Care that provides optimal dignity, safety, and comfort.

Exhibiting Sensitivity to Patient's Pain and Loss

A person who needs physical therapy may have a simple diagnosis, such as a broken leg, or an extremely complicated diagnosis. A **diagnosis** is simply a label for the patient's medical problem. An example of a complicated diagnosis would be about someone who has been in a serious automobile accident and has multiple traumas: broken bones, possible damage to the brain or spinal cord, and internal injuries that are life-threatening. Many patients recover completely and go on with their lives, but some will have to make major adjustments because the results of their injuries or illnesses are permanent. They may always need to use a wheelchair or crutches, or because of a brain or spinal injury, they may be unable to go back to their previous jobs. Their lives may be changed dramatically.

Injuries and illnesses cause pain. Patients often feel sick because of the medicines they must take or as an aftereffect of the anesthesia required for surgery. Even though they do not feel well, people must start moving about as soon as possible because it hastens their recovery.

When caring for patients, it is important to feel **empathy**. This means trying to figure out how the patient is feeling and provide care that is proper under the circumstances. Empathy is different from sympathy. **Sympathy** means you feel sorry for the patient. Sympathy can get in the way of good care because the patient's problems make the caregiver feel so bad that he or she is unable to help the patient.

For example, a physical therapist aide who is empathetic will understand that it is painful for a patient with a broken leg and a cast to stand up and walk with crutches. The aide will go slowly and encourage the patient, but will make every effort to help the patient stand up. The aide who is too sympathetic may not provide enough encouragement to help the person stand up; therefore, the patient may be slower to learn to walk with crutches and require a longer stay in the hospital.

Patients with **terminal illnesses** have an advanced stage of a disease that has an unfavorable prognosis and no known cure. Some patients who have terminal illnesses will probably die within a fairly short period of time. For example, some people who have cancer in the late stages can be treated but not cured. When patients and their families receive this news, they often experience a grief response that can take several forms. Patient and family may deny that the patient is ill. The patient may become very depressed. Sometimes patients will try to bargain with caregivers, hoping that by being good, they will get better. Some patients have accepted their illness and seem very calm. This sometimes upsets caregivers because these patients may appear to have given up.

No matter how difficult the patient's problems may seem to be, it is always important to be hopeful and optimistic about how things are going to turn out. Always try to find something positive to say. This does not mean laughing or joking when a patient seems very depressed or is crying. Let the patient know that you are there to help and by working together, he or she can achieve the best possible results. Sometimes patients will ask what you think about their problems. It is best to say, "I don't know, but I'll try to help you find out," and report the question to your supervisor.

Goal of Physical Therapy

The main goal of physical therapy is to help patients regain the maximum amount of ability to do things for themselves. **Optimum function** is the ability to perform the most that can be expected of an individual. For example, people who have spinal cord injuries may not be able to walk again, but they can do many things in a wheelchair: care for a family, go to school, go to work, etc.

Maintaining Patient Confidentiality

Patient confidentiality simply means not talking about patients with people who do not need that information. It means you should not gossip. Hospitals, clinics, and the people who work there are legally and ethically responsible for protecting information about patients.

Confidentiality means not discussing a patient's care with anyone except someone who is directly responsible for that patient: a patient's physicians or other caregivers. If you are in doubt, it is better not to say anything at all.

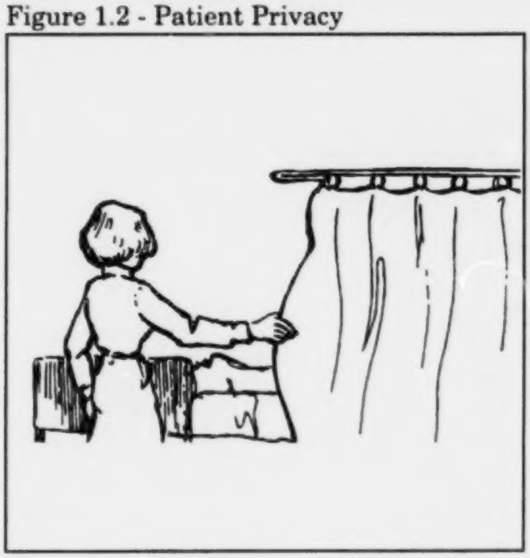
Maintaining Patient Privacy

Privacy can be difficult to maintain in a hospital or clinic. Show patients you respect their privacy; knock on the room or bathroom door before entering. To avoid causing embarrassment, speak to a patient from outside a curtained cubicle before going in to change the linens or to get equipment. Pull the curtain around the treatment table or bed to provide privacy (Figure 1.2).

Patient **privacy** is related to confidentiality. Sometimes patients need to say something that they feel is embarrassing, and they do not want someone else to overhear. Move the patient to a spot away from others in the room or speak in a low voice.

Privacy also relates to modesty. Hospital gowns and pajamas often do not offer much coverage. A patient may be unaware that his or her body is too exposed. In this situation, rearrange the patient's clothing or use a sheet, blanket, or towel to cover the patient.

Figure 1.2 - Patient Privacy



Sometimes a patient's behavior is inappropriate or embarrassing to others in the area. For example, a patient with a brain disorder might remove clothing and expose himself or herself in front of other patients, without realizing this is unacceptable behavior. Diverting the patient's attention to something else helps control inappropriate behavior and often helps the individual relearn acceptable public behavior. If that does not work, move the patient to a more private area to protect other patients from activities that are upsetting.

Ethical and Legal Decisions and Actions

Ethics

Ethics deal with moral conduct and judgment. We each have personal ethical standards. They reflect the way we act, the decisions we make, and the values we hold. Ethics go further than just trust and confidence. They deal with good and evil along with moral conduct and judgment. Ethics are voluntary controls--not laws. Ethics serve as a method of "self-policing" within health care professions.

The American Physical Therapy Association (APTA) has adopted two guides for conduct, the *Code of Ethics for Physical Therapists* and the *Standards of Ethical Conduct for the Physical Therapist Assistant*. The following is a summary of these ethical standards:

- Respect the rights and dignity of all individuals.
- Provide services within the limits of the law.
- Provide any services under the supervision of a physical therapist.
- Promote high standards and put the patient first.
- Protect the public and the profession from unethical, incompetent, and illegal acts.

Here are some guidelines that can help you decide whether a decision is ethical or unethical.

A decision is ethical if it:

- Enhances self-respect.
- Develops personal integrity and integrity in relationships.
- Builds genuine confidence in self and others.
- Maintains confidentiality and exhibits respect.

A decision is unethical if:

- It brings harm to others.
- It causes an illegal action.
- People are exploited or belittled.
- People are treated as inhuman objects.

Examples of unethical actions include:

- Discussing patient treatment outside the department.
- Promising "miraculous results" in a newspaper ad campaign.
- Degrading other medical personnel's work or treatment plan.
- Discussing other health care provider's fees.

Legal Aspects

In the health care environment, as in any business, laws dictate specific rules and regulations which must be strictly observed. Laws are divided into two basic categories, criminal and civil. A criminal act is a crime against society, for example, assault and bank robbery. A violation of civil law involves infringing upon a person's private rights as a citizen, such as sexual discrimination. Conduct may be unethical and still be legal.

Examples of illegal actions:

- Performing activities that require a state license without a license.
- Changing dates or entries in patient records and files.
- Causing injury to a patient because of negligence.
- Taking disposable gloves home for personal use.
- Using illegal drugs.

Appropriate Responses to Patients with Sensory Deficits

Many patients who receive physical therapy have difficulty moving. If an injury or disease affecting the nervous system is the cause of their loss of movement, they are said to have a **motor deficit.** Their muscles do not work properly. A great many patients will also lose some aspect of their special senses. The five special senses are vision, hearing, touch, taste, and smell. Patients who have lost part or all of one or more of these senses have a **sensory deficit.**

Vision loss has many causes and can range from complete blindness or blind spots to blurred vision. For example, after a stroke a patient may not have vision on one side. This will not change, regardless of how the patient's head is positioned. This type of patient must learn to be very careful because he or she will tend to walk or drive a wheelchair into objects on the blind side.

When an ambulatory patient is completely blind, let him or her take your elbow, and you lead the way by walking slightly ahead. If you do not know how to help, ask the patient to coach you.

Hearing loss has many causes. Head injury, medications, and aging commonly cause loss of hearing. A patient may be completely deaf or just be very hard-of-hearing and need to use sign language or a writing tablet. If the individual usually wears a hearing aid, be sure it is turned on and has a good battery. You can also demonstrate what it is you want the patient to do. When you need to give verbal instructions to a hearing impaired patient, face the patient, speak clearly, and speak slowly and loud enough for the patient to hear. You may have to repeat the message more than once. If the patient can see well, it may be easier to write a short message.

Loss of touch is common in patients who have injuries or diseases of the nervous system. A spinal cord injury, stroke, diabetes, or multiple sclerosis almost always causes this sensory loss. Because the sense of touch is protective, patients who lose their ability to feel are easily injured. Until this type of patient learns to protect himself or herself, it is up to the caregiver to watch out for hazards that could cause physical injury.

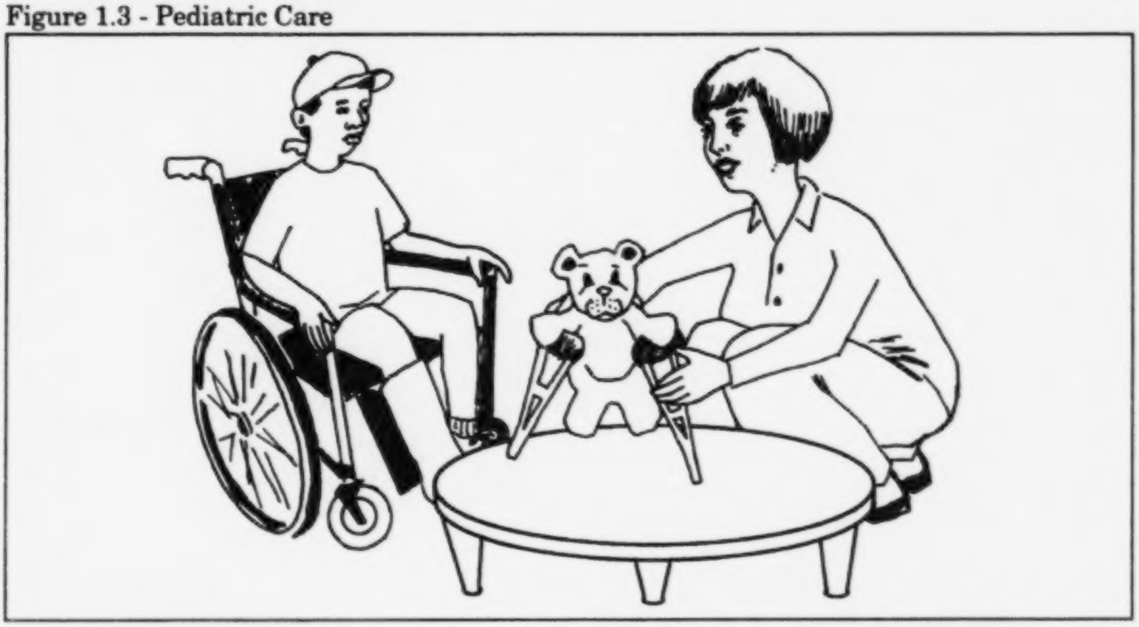
For example, if a patient's hand or foot falls off of the wheelchair, it may be bumped or caught in the wheels. A patient may not realize a heating pad or hot pack is too hot and he or she may be burned. A patient with poor sensation cannot tell when he or she has been in one position too long without moving and can develop sores in pressure areas. Many patients eventually learn to relieve pressure, protect insensitive areas, and check their skin. But until a patient learns to deal with insensitive areas, it is up to everyone, including physical therapist aides, to be alert for unsafe situations and protect the patient's skin.

Taste and smell are affected by head trauma and medications. While these senses do not directly affect physical therapy, they do affect recovery. These patients are not interested in food because it smells or tastes bad, or has no smell or taste at all. If the patient's diet is inadequate, injuries or incisions will be slow to heal and the patient will lack the energy to walk or exercise. A patient needs to finish meals before taking part in physical therapy. This situation can sometimes be helped by the aide reinforcing the need for nourishment through gentle inquiry and positive encouragement.

Techniques for Working with Children

Pediatric patients can be fun, or they can be the most difficult patients a physical therapist aide can encounter. It is difficult to reason with a child who is frightened or in pain. If you are working with smaller

Figure 1.3 - Pediatric Care



children, attempt to get down to their physical level. Kneeling by a wheelchair at eye-level may help eliminate some of their fears about your adult size or uniform (Figure 1.3). Children need to understand as much as they can about what is happening to them in the hospital or clinic. For example, explain to the child that he or she is going to physical therapy. An aide can use a doll to show what the child needs to do, such as getting into a wheelchair. You may be able to turn the activity into a game. Distraction with a toy or book can entertain small children. School-age children with chronic or long-term illnesses are often very familiar with the hospital and can discuss their situations in quite sophisticated ways. Older children and adults with injuries or acute illnesses are often more frightened than younger children. Parents need to be informed about their child's treatment and their assistance is often helpful. Occasionally, a child does better when the parent is not in the same room where the child is receiving a physical therapy treatment, for example, when learning to walk with crutches.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

Lesson 1: Techniques for Interacting with Patients

Activity Sheet

1. What are four common grief responses a physical therapist aide might expect to encounter when patients and family members receive bad news?

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

2. Explain the difference between empathy and sympathy. Which should a physical therapist aide use and why?

   ____

   ____

   ____

   ____

   ____

3. What is the major goal of physical therapy?

   ____

   ____

   ____

4. A patient in the physical therapy department asks you what is the matter with another patient across the room. If you tell one patient what is wrong with another patient, what basic patient right are you failing to protect?

   ____

5. A patient who is lying on a table is unaware that the hospital gown and sheet have slipped, leaving the patient exposed. What would be the best course of action for the physical therapist aide?

   ____

6. What action might a physical therapist aide take to help a young child who is frightened and crying, but must be transported to the physical therapy department in a wheelchair?

____

____

7. List three ethical standards adopted by the American Physical Therapy Association.

   a. ____________________________________

   b. ____________________________________

   c. ____________________________________

8. List three guidelines that can help you decide if a decision is ethical.

   a. ____________________________________

   b. ____________________________________

   c. ____________________________________

9. List three guidelines that can help you decide if a decision is unethical.

   a. ____________________________________

   b. ____________________________________

   c. ____________________________________

10. List three examples of unethical actions in physical therapy.

   a. ____________________________________

   b. ____________________________________

   c. ____________________________________

11. List three examples of illegal actions in physical therapy.

   a. ____________________________________

   b. ____________________________________

   c. ____________________________________

12. Describe the effect a motor deficit will have on a patient.

13. List the five major types of sensory deficits.

a.

b.

c.

d.

e.

14. Read the following scenarios and prepare an appropriate response on the lines provided. Discuss your answers with your clinical supervisor.

Scenario A: You are employed as a physical therapist aide. A well-known member of your community is hospitalized with a serious medical condition and is receiving treatment in the physical therapy clinic. When you are on a crowded elevator, two employees from another department mention that the individual is in the hospital, then turn to you and ask if the person's physical therapy treatment is helping. How might you respond so that you would not violate the patient's right to confidentiality?

Scenario B: As you are working in the physical therapy clinic, the person you are helping set up exercise equipment asks what is wrong with another patient across the room. How might you respond?

Scenario C: A member of the physical therapy department staff is very frustrated by a referring physician and complains loudly about the doctor's approach to treatment. One of the patients in the clinic was referred by the same doctor, and she overhears the remark. She states to you that she is offended by the remark and is worried about her doctor's ability. What should you do? How could this situation have been avoided?

Lesson 1: Techniques for Interacting with Patients

Clinical/Laboratory Activity Sheet

1. Empathy Laboratory:

   This activity will provide an opportunity for you to experience a little of the frustration and difficulty of a person with a permanent disability. You may be blindfolded, placed in a wheelchair, or given crutches to use to walk. Remember, at the end of this exercise you will be able to return to "normal." Your patient may deal with these changes for a lifetime. Have supplies available that represent various disabilities: wheelchairs, canes, crutches, elastic bandages, cotton balls to plug ears, old eyeglasses with Vaseline™ or patches over the lens. Work with another student; one acts as a patient and the other as a physical therapist aide. Switch roles and do activities again. Go on a "Trust Walk" in which the patient is totally reliant on the physical therapist aide. Help the student acting as a patient fill out a hospital admission form. Help the student acting as a patient take a wheelchair through a doorway.

2. Getting in touch with patient problems:

   a. Try to transfer yourself from a wheelchair to another chair or an elevated mat without using your legs at all.

   b. Try to eat or comb your hair with only one hand; try combing your hair without raising your elbow above shoulder level.

   c. Close your eyes and see if you can determine what is going on around you.

3. Practice asking a patient behind a curtain:

   a. If he or she needs assistance.

   b. If you may come in to get a piece of equipment needed elsewhere.

4. Role-play a response to a patient who seems very depressed and asks "What do you think is wrong with me? Do you think I will be able to walk again?"

5. Observe how patient privacy is maintained at your clinic.

6. When working in the physical therapy department, practice what you have learned by:

   a. Exhibiting sensitivity to patient's pain or loss.
   b. Maintaining patient confidentiality.
   c. Maintaining patient privacy.
   d. Acting in an ethical and legal manner.
   e. Responding appropriately to patients with sensory deficits.
   f. Utilizing techniques to encourage cooperation of pediatric patients.

Lesson 2:
Lines, Tubes, Bags, and Wound Dressings

Objectives:

A. Indicate situations that require assistance to safely manage a patient with lines, tubes, bags, or wound dressings in place.

B. Follow Body Substance Precautions.

C. Identify lines, tubes, and bags frequently encountered with patients receiving physical therapy.

D. Reposition a displaced nasal cannula or oxygen mask.

E. Identify precautions for handling a patient who is using a colostomy bag.

F. Explain the care needed by a patient with wound dressings in place.

G. Recognize major components of an intravenous (IV) line.

H. Identify precautions for handling a patient with an IV.

I. Identify the major parts of a urinary drainage system and what to do if a problem arises with the system.

J. Identify nasogastric (NG) and gastrostomy (G) tubes and what to do if a problem arises with them.

Key Terms:

- Nasal cannula or oxygen mask
- Colostomy bag
- Wound drainage tube
- Intravenous (IV) line
- Infiltration
- Urinary catheter
- Nasogastric tube (NG tube)
- Gastrostomy tube (G tube)

Lifesaving medical treatment includes the use of many devices that remain attached to patients for hours, days, weeks, or a lifetime. Physical therapy can proceed with these devices in place. To avoid injuring the patient, however, the physical therapist aide must know what these devices are, how to handle them, and how to recognize if something is wrong with them. Care must be taken to avoid situations that might dislodge lines or tubes that enter the patient's body or dressings that cover a wound site. By planning ahead, the physical therapist aide can avoid situations that may pull on or displace the devices that are essential to the patient's comfort and recovery.

When Do You Need to Get Assistance?

If you notice something wrong with a line, tube, or dressing and you are in the physical therapy department, notify the patient's therapist. If you are working as a transporter and notice something wrong before moving the patient, notify the patient's nurse, case manager, or supervisor. Regardless of the setting, you should avoid upsetting the patient. Put on the call light or calmly call for the nurse or therapist to please check the line, tube, or dressing.

It can be very difficult to transfer a patient who has various pieces of equipment attached to his or her body. Transferring a patient can be made easier if two people work together. One person can assist the patient while the other keeps the lines and/or tubes untangled and free of tension.

Specific instructions for situations in which devices appear to be malfunctioning will be addressed with each type of equipment.

If a device's alarm sounds, you should summon your supervisor or the patient's nurse to check to see what is wrong. **Under no circumstances should you try to fix the problem by changing settings, pulling on the tube or line, or touching the device where it enters the patient's body.**

Body Substance Precautions

For many years, the primary strategy to protect health care workers from the spread of disease was to take special precautions if the patient was known to have an infectious disease. Since many diseases can be carried and transmitted without visible signs or symptoms of the disease, such as human immunodeficiency virus (HIV) and hepatitis B virus, the Centers for Disease Control and Prevention developed the Universal Precautions system. In the Universal Precautions system, blood and certain body fluids of all patients are treated as if a blood borne pathogen were present. Since the Universal Precautions system was developed to protect workers from blood borne pathogens, it does not cover all body fluids and substances. Body substances that do not carry blood borne pathogens such as saliva, sputum, perspiration, feces, and urine are not included unless they contain visible blood.

Because health care workers are exposed to many types of communicable diseases in addition to those caused by blood borne pathogens, the Body Substance Precautions system was developed. Body Substance Precautions system covers all moist body substances (blood, feces, urine, wound drainage, tissues, oral secretions, and other body secretions). The aide should follow this standard by wearing gloves if there is any chance of making contact with moist body substances. If patient contact could result in splashing body fluids, a scrub gown should be worn over the worker's uniform, along with a mask and goggles.

Protecting yourself and other patients from contact with a communicable disease requires a common sense approach. If you feel unsure about the correct protective equipment to use, ask your supervisor for guidance. Aides who follow this standard protect themselves from undiagnosed diseases, while treating all patients alike and protecting them from accidental transmission of disease.

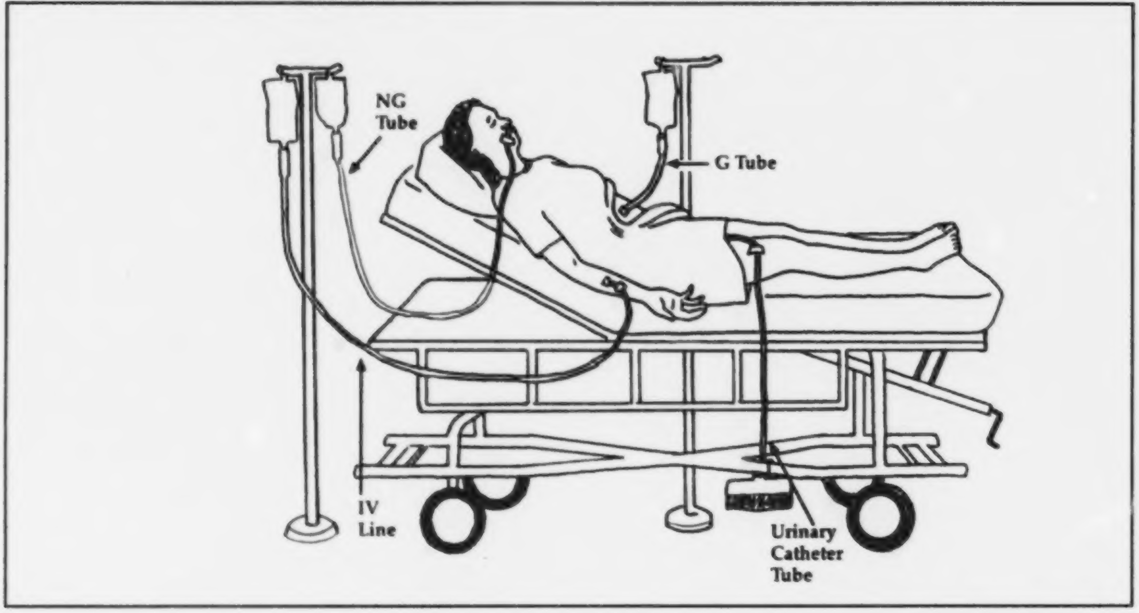
The aide must know how to properly dispose of contaminated gloves, gowns, and masks. A receptacle or receptacles should be labeled for used dressings, disposable gloves, and disposable gowns and masks. Some settings will have a labeled container for reusable gowns that must be sent to a laundry.

Regular, thorough hand washing both before and after you work with each patient **is absolutely essential in order to prevent the spread of infectious diseases. You must wash your hands even if you have worn gloves.** You must wash your hands after you blow your nose or visit the toilet. Even a minor infection such as the common cold, if transmitted to a patient, could mean serious illness or even death.

Common Lines, Tubes, and Bags Used in Patient Treatment

The most common lines or tubes seen in physical therapy are intravenous (IV) lines, nasogastric tubes (NG tubes), gastrostomy

Figure 2.1 - Common Lines and Tubes



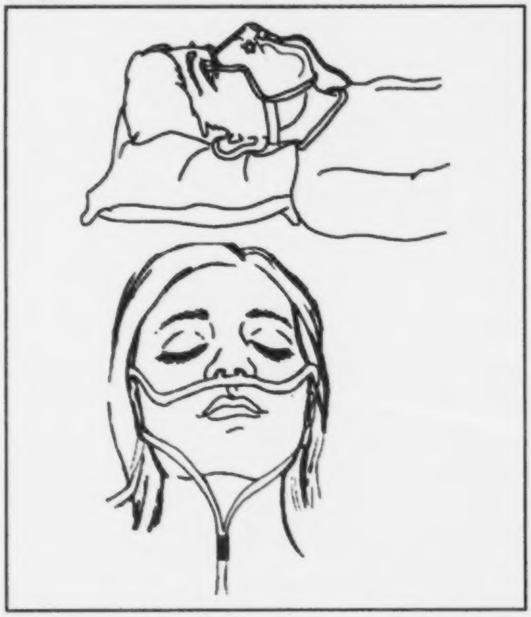
tubes (G tubes), and urinary catheters (Figure 2.1). The IV needle is inserted into a vein. The nasogastric tube runs from the nose to the stomach. The gastrostomy tube goes through an incision directly into the stomach. The urinary catheter leads from the bladder to a collection bag. Nasal cannula, oxygen masks, and colostomy bags are occasionally encountered in the physical therapy department. Since IVS, NG tubes, G tubes, and urinary catheters are frequently encountered, they are addressed separately later in this lesson.

Nasal Cannula or Oxygen Mask

Physical therapy patients who have heart or lung disease often receive treatment while in wheelchairs or on carts that have oxygen containers attached. They need the extra oxygen so they can exercise. The patient breathes humidified oxygen through a **nasal cannula** or an **oxygen mask** (Figure 2.2). If the cannula or mask slips out of place, the aide should replace it carefully.

If the patient's oxygen supply runs low, a new tank should be obtained and hooked up. Unless the aide has been taught to monitor the oxygen delivery, it is the responsibility of the therapist or assistant

Figure 2.2 - Nasal Cannula and Oxygen Mask

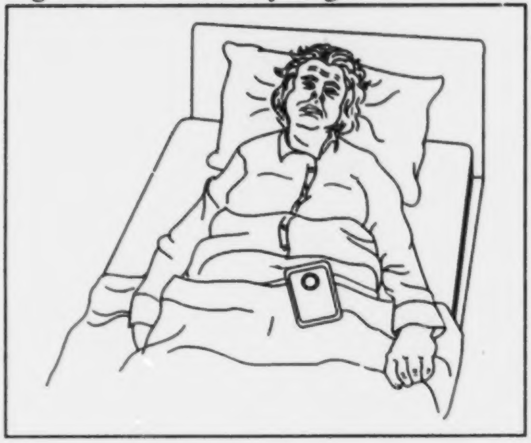


to ensure there is enough oxygen left in the tank.

Colostomy Bag

A **colostomy bag** is worn by a patient who has had surgical removal of part of the intestine. The intestine is brought through the abdominal wall at a "stoma," or surgical opening. The patient's bowel contents empty into the colostomy bag that is attached to the body over the opening (Figure 2.3). The colostomy bag presents few problems, although there is a small risk of pulling the bag off and possibly embarrassing the patient. If the colostomy bag leaks or is pulled off, use proper Body Substance Precautions to clean the patient and any contaminated surfaces. Notify the therapist or the patient's nurse that the colostomy bag has leaked or come loose. Do not attempt to reattach the bag.

Figure 2.3 - Colostomy Bag



Wound Dressings and Drainage Tubes

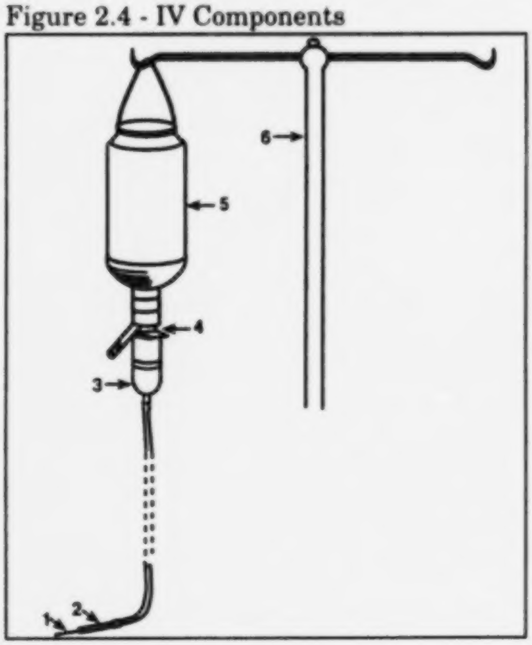
Patients who have had surgery or an injury will usually have a sterile dressing placed over the area, taped or secured with an elastic wrap. Sometimes a dressing is applied around a drain tube placed in the wound (called a **wound drainage tube**) or at the site where an intravenous tube enters the body. A patient's wound dressings must be carefully managed so they are not accidentally loosened. Wound drainage sometimes seeps through dressings, presenting a hazard to both patient and caregiver. A wet dressing may allow contaminants to seep into the wound. If the outside of the dressing appears damp, Body Substance Precautions must be observed in assisting the patient. The therapist or assistant will determine whether the area can be managed with an additional dressing or if treatment must be discontinued until the dressing is changed by either a member of the physical therapy staff or the patient's nurse.

Care should be taken with wound drainage tubes that exit the body and are covered with a dressing. Drain tubes usually have a collection device on the end and the device may be heavy with fluid. Do not drop or allow tension on the line as it may be pulled out of the wound site. If a drain tube should be dislodged, notify the patient's therapist or nurse.

Identify Components of an Intravenous (IV) Line

An **intravenous line** is commonly called an "IV" (Figure 2.4). It consists of (1) a needle inserted in a vein (usually forearm or hand), (2) a plastic tube that goes from the needle to the fluid container, (3) a drip chamber where the flow of liquid can be monitored, (4) a small valve on the tube that controls the "drip," (the rate the liquid is given to the patient), (5) the fluid container, either a bag or a plastic or glass bottle, and (6) the IV pole. Many IVS are controlled by a small computer that regulates the rate.

Figure 2.4 - IV Components



Precautions for Handling Patients with IVS

Fluid in the container enters the patient's body by the force of gravity. The plastic bag or bottle containing the IV fluid must be kept above the level of the patient's heart. The fluid container must remain elevated, and the line free of kinks or pressure.

Intravenous lines usually have an alarm that sounds when the tube is blocked, when the solution in the fluid container is almost empty, when the pump is unplugged, or when a battery is about to run down. When the alarm goes off in the physical therapy department, it is usually because the battery is running low since it was unplugged from the wall outlet in the patient's room. See if the device can be plugged into a wall outlet. The aide should not reset the alarm. After the therapist or assistant presses the reset button, the alarm should quiet. If the alarm continues, your supervisor will probably notify the patient's nurse.

Infiltration is a situation when the IV fluid does not enter the vein, but is infused, that is, goes into the tissues near the insertion site. Infiltration can occur despite the most careful handling of the patient or cautious movement by the patient. If the area where a needle is inserted appears swollen or is hard to the touch, or if blood is backing up into the line, you should notify your supervisor or the patient's nurse. A small amount of blood in the line is usually not important. If an IV line is pulled out, notify your supervisor or the patient's nurse.

A small dressing is often placed around the IV line at the site of entry. If the gauze dressing is wet, the patient's nurse or therapist should be notified. Body Substance Precautions should be observed if the area must be handled.

Maintaining Urinary Catheters

A catheter is a hollow plastic tube that has many medical uses. A very common type of catheter is used as part of a urinary collection system. The urinary catheter, often called the patient's catheter or a "Foley," is frequently seen with hospitalized patients.

Patients often come to the physical therapy department with urinary catheters in place. A **urinary catheter** is a tube placed into the urinary bladder through the urethra (from the body opening to the bladder). The end of the catheter has a small balloon device to keep it in place in the bladder, keeping it from being easily pulled out. The other end of the tube is attached to the collection bag.

Always avoid situations that allow the catheter to be pulled. If the catheter is pulled out of the patient's body, it is painful and can injure the patient when the balloon device is pulled through the urethra. The patient's nurse must replace the catheter before treatment can resume.

The urinary collection bag that is on the other end of the catheter should NEVER be held higher than the patient's bladder. Elevating the collection bag too high may cause urine to flow back into the patient's body. If the collection bag is accidentally detached from the catheter and spills, Body Substance Precautions should be followed when cleaning up. If you are asked to empty the collection bag, always observe and record the amount of urine in the bag. Give the information to the therapist or assistant so the patient's nurse can be informed.

Nasogastric Tube

A **nasogastric tube (NG tube)** is used to feed the patient a liquid diet when the patient cannot swallow food. The NG tube can also be attached to suction to remove drainage from the stomach. The tube is usually taped at the patient's nose, where it enters the body and goes to the stomach. A patient who has a nasogastric tube may not be responsive or alert, and the patient's physician may write an order for hand restraints to prevent the patient from pulling the tube out. If the NG tube is accidentally pulled out, notify the nursing staff so the tube can be replaced.

Gastrostomy Tube

A **gastrostomy tube (G tube)** is a catheter that is surgically placed in a patient's stomach through the abdominal wall. This is done for patients who cannot eat or drink normally. Unless the patient is unresponsive or not alert, the gastrostomy tube does not usually present any difficulty to caregivers. If a gait belt is placed around the patient's waist before taking a walk, take care when placing the belt so that it does not pull on the gastrostomy tube.

A summary of the lines, tubes, and bags, some problems commonly associated with them, as well as procedures to follow if a problem arises is presented in Figure 2.5.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

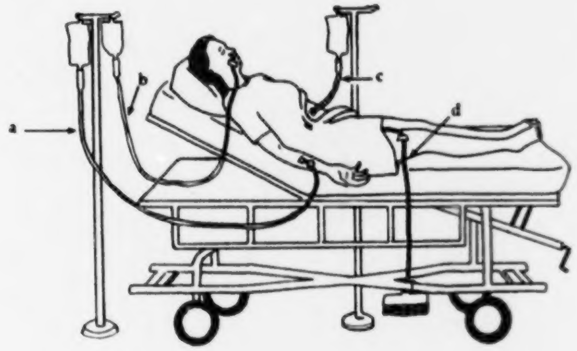
Figure 2.5 - Possible Problems with Lines, Tubes, Bags, and Dressings and Procedures for Managing Them

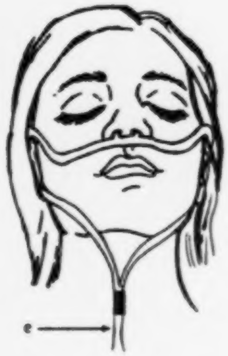
Type	Problem	Procedure
Intravenous line (IV)	• Alarm sounds	Plug in; notify supervisor
	• Pulled out • Infiltrating tissue • Large amount of blood in line	Notify supervisor or nurse
Wound dressing and drainage tube	• Moisture on dressing • Tube pulled out	Notify supervisor or nurse
Nasal cannula or oxygen mask	• Dislodged from nose	Replace gently
Colostomy bag	• Leakage • Dislodged	Clean area using Body Substance Precautions; notify supervisor or nurse
Nasogastric tube	• Patient attempts to pull out	Constantly monitor patient; reassure, distract
	• Pulled out	Notify supervisor or nurse
Gastrostomy tube	• Pulled out	Notify supervisor or nurse
Urinary catheter and bag	• Pulled out	Notify supervisor or nurse
	• Leakage	Clean area using Body Substance Precautions; notify supervisor or nurse

Lesson 2: Lines, Tubes, Bags, and Wound Dressings

Activity Sheet

1. Identify the name of each device pictured by writing its name.





a. ______________________________

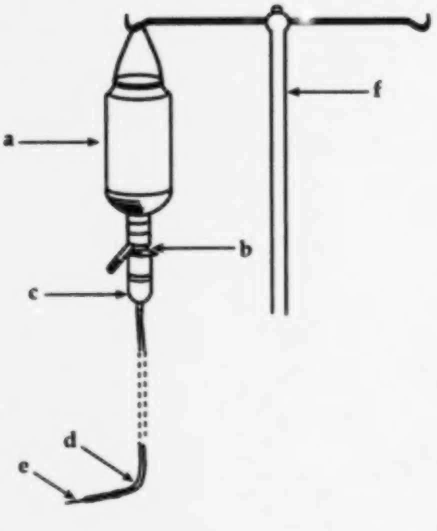
b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

2. Label the parts of the IV.



a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

3. **Who should you notify if you notice something wrong with a line or tube before you transport the patient?**

4. List two indications of a nonfunctioning IV.

   a.

   b.

5. Why should the urinary catheter bag holding urine NOT be held above the patient's bladder?

6. Why is regular, thorough hand washing essential in the physical therapy clinic?

7. Why are Body Substance Precautions practiced on all patients?

8. What should you do if a nasal cannula or oxygen mask slips out of place?

9. What are the main parts of a urinary drainage system?

10. At what height must the IV container be kept?

11. What should you do if you notice blood seeping through a dressing?

____

____

12. What should you do if a colostomy bag or urinary collection bag is leaking?

____

____

13. Why is it important to NOT pull on a urinary catheter?

____

____

Lesson 2: Lines, Tubes, Bags, and Wound Dressings

Clinical/Laboratory Activity Sheet

1. Examine the parts of an indwelling (Foley) catheter. How is the bulb (balloon) enlarged to keep the catheter from coming out of the bladder?

2. Determine how and where to attach a catheter bag to a wheelchair so that it is safe from being dragged or run over by the wheel, but will still be lower than the patient's bladder. Practice attaching it to the wheelchair to test your theory. Write a paragraph explaining the best method and give it to your clinical supervisor.

3. Observe how an oxygen tank and the nasal cannula are prepared and placed on a patient who needs extra oxygen.

4. With a classmate acting as the "patient," practice replacing the nasal cannula and oxygen masks.

5. Observe how lines, tubes, and bags are handled by the therapist or assistant. Notice when someone is assisting another during physical therapy. Is assistance needed because the therapy is complicated or is it because the patient has several lines, tubes, or bags?

6. Practice transporting a student in a wheelchair with a mock IV taped to the student's arm.
7. Demonstrate thorough hand washing technique.
8. Practice Body Substance Precautions when working in the physical therapy department.

Lesson 3:
Assisting the Patient with Comfort and Self-Care

Objectives:

A. Assist patient in changing clothes before treatment.

B. Assist patient in changing clothes after treatment.

C. Identify safety precautions to follow when dressing and undressing patients who have lines, tubes, and bags.

D. Assist patient with toileting.

Key Terms:

- I & O

Patients frequently need help with clothing and toileting when receiving physical therapy. Remember that for some patients putting on and removing clothes is a learning process. The physical therapist aide should allow the patient to do as much as possible without help. An occupational therapist may have spent time teaching the individual to manage clothes; those lessons should be reinforced.

Remember to wash your hands before helping the patient. Use Body Substance Precautions during toileting.

Changing Clothes Before and After Treatment

Certain physical therapy treatments require clothing to be changed. Always provide privacy when a patient's clothes are being changed. Independent patients can be instructed to remove clothing, place it out of the way, and put on clothing appropriate for treatment. The patient's therapist will instruct you and the patient about what to wear for planned activities. If no hospital gown or clinic garment is to be put on, the patient should be covered with a sheet.

If it appears the patient will have difficulty with putting on and removing clothes, ask if you can help. If the patient wants assistance, ask if there is a preferred way. If only one side is affected, it is usually best to remove the unaffected arm or leg first. If you hold the garment steady, the patient can often pull free of the clothing. This will be less painful than if you try to remove the clothing without the patient's help. This kind of assistance is similar to what you do when you help someone else put on or take off a heavy coat. Some patients will be partially or totally dependent on you to change clothes for treatment.

If one side of the patient's body is weak, the weak arm should be put in its sleeve first, followed by the stronger arm. If the patient has generalized weakness or is confused, you will need to help place his or her arms and legs into the clothing. Arrange clothing so that it is smooth and not binding at the neck, arms, or seat. Before you button or tie clothing, ask the patient if assistance is needed. A patient often feels better if allowed to do these tasks independently or with only a little help.

Patients should wear something on their feet if they are sitting in a wheelchair or preparing to walk. Patients who are on a treatment table or mat do not have to wear footwear. If the patient brought slippers or shoes and socks, assist the patient in putting them on. If a patient's shoes are used, they should be appropriate for the activity. For ambulation, shoes should have nonskid rubber soles instead of slick leather soles. Shoes often require a shoe spoon. Do not put on shoes without socks or stockings. Shake out shoes to be sure there is no debris in them. Inspect the patient's feet for red spots or abrasions before you put on the shoes. If you notice any abnormal skin areas, report them to the patient's therapist.

Steps of Procedure for Assisting Patient in Changing Clothes Before Treatment:

1. Wash your hands.

2. Arrange necessary clothing.

3. Identify and greet patient. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Assist patient from wheelchair to the mat; if he or she is able, have patient sit on side of mat. If unable, help patient to lie down.

7. Shoes and stockings:

    a. Loosen shoelaces, pull the tongue of the shoe forward and up.

    b. Support the ankle and slide the foot out of the shoe.

    c. Slide the sock or stocking down to the ankle.

    d. Support the ankle and slide the stocking off the foot.

    e. Place socks/stockings inside shoes. Place shoes out of the way.

8. Pullover sweater/shirt (sitting only):

    a. Loosen first (unzip/unbutton), then grasp the bottom of garment at the back and pull on the neck.

    b. Pull over head.

    c. Pull garment off the arms.

9. Dress/shirt (lying):

    a. Unfasten garment.

    b. Roll patient to weak side and remove the sleeve from the strong arm.

    c. Tuck the half-removed garment under patient.

    d. Return patient to back; turn him or her slightly in the opposite direction; grasp the garment and pull the sleeve off weak arm.

    Dress/shirt (sitting):

    a. Unfasten garment.

    b. Remove the sleeve from the strong arm then the weak arm.

10. Slacks/pants/underpants:

    a. Unfasten pants at the waist and unzip.

    b. Have patient stand if able and pull pants off legs.

    c. If patient is lying down, have him or her lift hips up and slip pants down over buttocks. If patient is unable to do this, roll patient toward you, slip pants down over hip, then turn to back and to opposite side and pull pants down over other hip.

  d. Return patient to back and slide pants down over legs. Pull pants over feet.

11. Undershirt/slip is removed following the same steps as for a pullover sweater/shirt.

12. Brassiere:

    a. Unfasten bra or assist patient to unfasten bra.

    b. Slip arms out of shoulder straps.

13. Store clothing and personal belongings (wallet, watch, etc.) appropriately. If garments are soiled, place them in an appropriate container.

14. Place patient in a comfortable and safe position.

15. Assist patient in putting on hospital gown to fasten in back (sitting):

    a. Put patient's weak arm in sleeve first.

    b. Assist in placing strong arm next.

    c. Fasten closure in back.

    Assist in putting on hospital gown (lying):

    a. Raise weak arm and insert it into sleeve.

    b. Assist with placing strong arm in sleeve.

    c. Tuck gown under the patient's sides.

    d. Roll patient to weak side and fasten the closure in back (if needed).

16. Wash your hands.

17. Record observations and report anything unusual to the therapist.

Steps of Procedure for Assisting Patient in Changing Clothes After Treatment:

1. Wash your hands.

2. Assemble necessary clothing.

3. Identify and greet patient. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Assist patient in removing clothes worn during treatment, if needed.

7. If patient is on mat, put on underclothes, stockings, slacks, and shoes while lying down.

8. Brassiere:

    a. If patient can assist, place around her chest so fasteners are in front; fasten bra.

    b. Shift it around so fasteners are in back.

    c. Instruct patient to slip arms through the shoulder straps.

9. Undershirt/slip:

    a. Assist or have patient put arms into the undershirt/slip first.

   b. Assist or have patient put head into the undershirt/slip.

   c. Check and make sure the undershirt/slip does not remain rolled up on the patient's back. Pull down to waist.

10. Stockings/socks:

    a. Roll the stocking down from the opening to just beyond the heel.

    b. Support the patient's ankle and slip the rolled stocking over the toes; position it over the heel, and pull it up smoothly over the leg.

11. Underpants/slacks/pants:

    a. Put both legs in pants; slide up to hips.

    b. Have patient lift his or her hips and pull pants up. If patient is unable to, turn to one side and slip pants over hip, then turn to opposite side and pull pants over hip.

    c. Zip the zipper and fasten the snap or button (if applicable).

    d. If patient has a catheter, leave the fly open to allow for tubing, then pin the fly shut.

12. Shoes:

    a. Always help patient put shoes on before standing up from the mat to avoid slipping on the floor.

    b. Loosen laces and pull the tongue of the shoe forward and up.

    c. Support the patient's ankle as you slide the toes, foot, and heel into the shoe. Use a shoe spoon if necessary.

    d. If possible, have patient tie shoelaces.

13. Assist patient into a sitting position on side of mat or to a chair.

14. Dress/shirt:

    a. Assist or have patient put weak arm in sleeve of garment first.

    b. Put other arm in next.

    c. If both arms are weak, put dress on over feet, then put arms in sleeves.

15. Pullover sweater/shirt is put on following the same steps as for an undershirt/slip.

16. Place soiled garments in appropriate container.

17. Wash your hands.

18. Record observations and report anything unusual to the therapist.

If a wheelchair patient is wearing only a hospital gown and is about to stand up to practice walking, a robe or another hospital gown put on backwards may be a sufficient covering. If pajama bottoms are available, the legs may be slipped over the feet while the patient is sitting and pulled up discreetly as the patient stands.

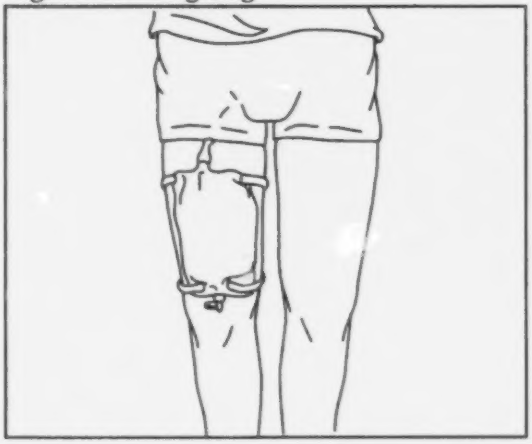
Helping a Patient with Lines or Tubing to Dress or Undress

A patient with an IV line or catheter will require special precautions when dressing and undressing. You must think through the procedure before you start. Avoid pulling on the lines or tubes. An IV bottle must always be held above the level of the heart. A catheter bag must always be held below the level of the bladder. Be sure to get help if the patient has several lines, tubes, or bags. Always move the patient toward the lines and tubes while maintaining slack in the lines or tubing. For example, move the stand holding the IV container, then move the patient toward it.

Dressing and undressing the upper body with an IV line in place - If a gown with snaps or Velcro™ closures on the shoulders, sides, and underarms is used, gowning the patient with an IV is rather easy. Arrange the clean gown over the patient's shoulders, then fasten the sleeves and sides, keeping the garment free around the IV line. Reverse the process to remove the gown.

If the patient's IV is connected to a machine, you will be unable to put the patient's arm through the sleeve. If a snap or velcro-closing gown is not available, place only the unaffected arm through a sleeve as the arm with the IV will not pass through a sleeve. Bring the gown under the patient's affected arm, toga-style, and fasten it loosely around the patient so it will not fall off the unaffected shoulder. Sometimes a second gown is put on to provide additional coverage in this area.

Figure 3.1 - Leg Bag



If there is any question about how to assist the patient who has an IV line to dress or undress, consult with your supervisor.

Dressing the lower body with a urinary catheter in place - Patients with a permanent indwelling catheter often have a smaller collection bag strapped to the leg (Figure 3.1). Dressing or undressing these patients represents no additional problems. However, many hospitalized patients will have a urinary catheter with a large collection bag that is suspended from their bed or wheelchair. Consult with the patient's therapist for special instructions on how to dress the patient. For example, you may put pajama bottoms or trousers on the patient in the usual manner, but pass the catheter tubing through the fly in front of the garment. Then fasten the garment around the waist and carefully pin the fly front closed without pulling on the catheter. Reattach the catheter bag to the wheelchair frame below the level of the bladder. Reverse the process to undress the patient.

Assisting a Patient with Toileting

It is not unusual for a patient to use the bathroom while in the physical therapy department. Direct independent patients to the location of the nearest bathroom. If a patient needs assistance, check with the therapist for special instructions regarding elimination. For example, I & O for many patients must be documented by the therapist. **I & O** means fluid intake and output. Fluid intake consists of all liquids and solids that become liquid at room temperature. Fluids that are considered output or are eliminated include urine, emesis, bleeding, diarrhea, and excessive sweating. If documentation is required, you must collect and measure urinary output or observe characteristics of stool. A special specimen container may be required for collection. You must also find out if it is safe to transfer the patient to the bathroom by yourself.

When you assist a patient walking to the bathroom, ask him or her to leave the door unlocked. Place the signal cord so that the patient can reach it when finished or when assistance is needed. Before assisting the patient back to the treatment area, make sure the patient washes his or her hands.

If the aide is only assisting the patient to walk to the bathroom, gloves are not needed. However, you must wear gloves any time you assist a patient in toileting. Always dispose of gloves in a contaminated waste container. Always wash hands after removing gloves.

If patient is unable to transfer to the bathroom, a bedpan or urinal will need to be used (Figure 3.2).

After a bedpan or urinal has been used, urine or feces must be flushed down a toilet. The bedpan or urinal should be rinsed, placed in a plastic bag, sealed, and returned to the appropriate department to be cleaned and sterilized.

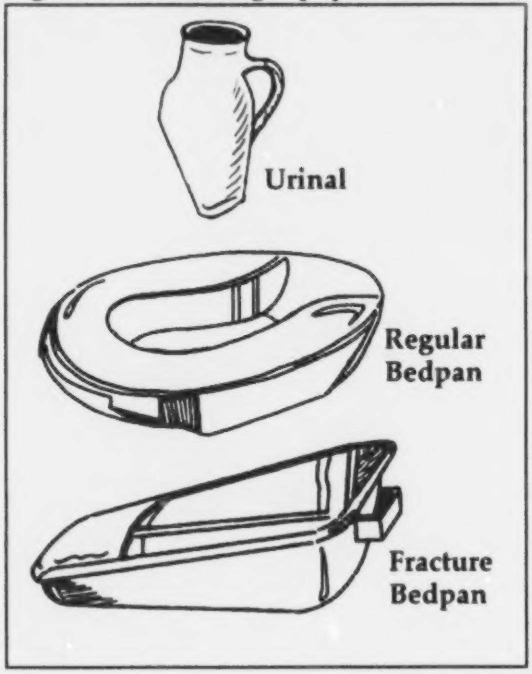


Figure 3.2 - Toileting Equipment

Transferring to a Toilet

A wheelchair patient who is able to transfer can usually be wheeled into the bathroom and assisted to stand, remove clothing, sit, and use the toilet. If you can leave the patient and close the bathroom door, be sure the signal cord and toilet paper are within easy reach of the patient. After five minutes, return, knock, and check to see if the patient is ready to leave. If the patient is disoriented or unsteady, you must stay in the bathroom with the patient for safety.

Bedpan on an Exercise Mat

A patient exercising on a mat may not have time to transfer back to a wheelchair and then to a toilet. In this situation, pull the curtain and place a sheet over the patient. Because the mat does not have the amount of "give" found in a hospital bed, a fracture bedpan is more comfortable for the patient. You may place a bedpan under a patient on a mat with either the bridging or the rolling technique, just as when the patient is in a hospital bed. For the regular bedpan, place the wide rim toward the patient's head. For the fracture bedpan, place the narrow end toward the patient's head and the handle toward the patient's feet.

Steps of Procedure for Assisting Patient in Using Bedpan on Mat:

1. Wash your hands. Put on gloves.
2. Assemble necessary equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.

5. Provide privacy.

6. Patient should be in supine position. Turn back top bedding.

7. Prepare bedpan. Sprinkle powder on bedpan to prevent sticking. Place bedpan near patient.

8. If patient is able to help:

   a. Have patient flex his or her knees and lift buttocks off mat. Assist by slipping your hand under the lower part of the back. If patient has pajamas or underwear on, lower it to knees.

   b. With your other hand, slip the bedpan under the patient's hips and adjust (Figure 3.3).

   If patient is unable to help:

   a. Turn patient on his or her side away from you.

   b. Expose buttocks and position bedpan firmly against buttocks.

   c. Place a small pillow or rolled towel at the top of bedpan at the small of the patient's back (Figure 3.4).

   d. Turn the patient toward you and onto the bedpan.

Figure 3.3 - Bridging Technique

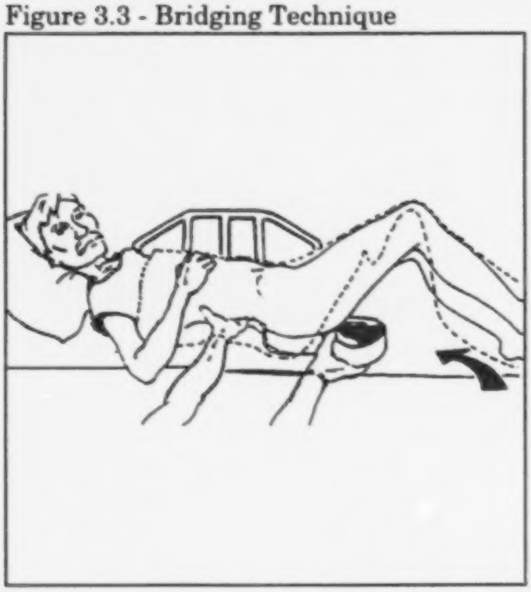
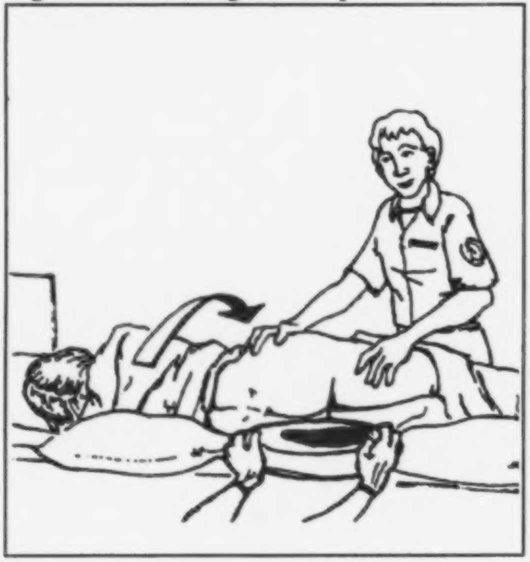


Figure 3.4 - Rolling Technique



8. For patient safety, remain nearby. Place toilet tissue within the patient's reach.

9. Return to the patient's side when he or she signals or check on him or her after five minutes. Do not leave a patient on a bedpan over ten minutes. It may lead to extreme discomfort and result in skin breakdown.

10. If patient is able to assist - Place one hand under the small of the back and assist patient to lift hips. Hold bedpan with other hand.

If patient is unable to assist - Hold the bedpan with one hand and roll the patient off the bedpan with the other hand. This will prevent spilling the contents of the bedpan.

11. Wipe patient from front to back with toilet paper, and drop paper in bedpan. If patient is on I & O, place paper in appropriate container, not in the bedpan.

12. Remove bedpan, then cover it with a towel.

13. Wash the perineal area with a warm, wet washcloth from front to back.

14. Pat area dry from front to back.

15. Give patient a clean, wet washcloth to wash his or her hands if needed, and make patient comfortable.

16. Take bedpan to bathroom; measure urine if on I & O, and empty contents into toilet.

17. Rinse and bag bedpan.

18. Remove gloves and dispose of in appropriate container. Wash hands. Make note of output if necessary.

19. Send bedpan to appropriate department for cleaning and sterilization.

20. Report anything unusual to the therapist.

When the patient has been moved off of the mat, wash the mat before it is used by another patient.

If a patient is on a gurney, a bedpan can be used in the same method as for the mat.

Using a Urinal

If a male patient needs only to urinate, using a urinal may be more simple and time-saving than transferring him to a toilet.

Steps of Procedure for Assisting Patient to Use Urinal (lying down):

1. Wash your hands. Put on gloves.

2. Assemble necessary equipment.

3. Identify and greet patient. Identify self.
4. Explain what you are going to do.

5. Provide privacy.

6. Turn back sheet. Expose the perineal area.

7. Place the patient's penis in the urinal and lay the urinal between his legs.

8. Make sure the urinal is placed at an angle. The flat side should be lying on the bed.

9. For patient safety, stand nearby.

10. When patient signals, remove and cover the urinal with a towel.

11. Take it to the bathroom. Measure urine if on I & O and empty into toilet.

12. Give patient a clean, wet washcloth to wash his hands.

13. Rinse and bag urinal.

14. Remove gloves and dispose of in appropriate container. Wash hands. Make note of output if necessary.

15. Send urinal to appropriate department for cleaning and sterilization.

16. Report anything unusual to the therapist.

If the patient is in a wheelchair, move him to a private area or pull a curtain. If the patient is independent and can manage by himself, give him the clean urinal. If the patient needs assistance, or is confused, wash your hands and put on gloves. Move clothing out of the way and place the urinal between the patient's legs so that it can rest on the chair to catch the urine. Allow the patient five minutes. When you return, remove the urinal and rearrange the patient's clothing. If urinary output is being measured, be sure to record the amount. Flush the urine down a toilet; never use the sink. Discard gloves and wash your hands. Have the patient wash his hands, too.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

After you have completed the activity sheets, you may take the written unit evaluation. A score of at least 80 percent indicates that you may proceed to the next unit. Check with your clinical supervising staff member for skill testing.

Lesson 3: Assisting the Patient with Comfort and Self-Care

Activity Sheet

1. What type of shoes should a patient wear for ambulation exercises?

   ____

2. If a patient has one weak arm, which arm should be placed into the sleeve of a gown or shirt first?

   ____

3. What are three things to remember before helping a patient put on shoes?

   a. ______________________________

   b. ______________________________

   c. ______________________________

4. What kind of hospital gown makes it simple to dress and undress a patient with an IV line?

   ____

5. Why is it better to use a fracture bedpan instead of a regular bedpan for a patient on an exercise mat?

   ____

6. When placing a regular bedpan under a patient on a mat, which direction should the wide rim face?

   ____

7. When placing a fracture bedpan under a patient on a mat, which direction should the narrow end face?

   ____

8. If a patient has a urinary catheter with a large collection bag, who should the aide check with before dressing the patient for treatment?

   ____

9. What two techniques can be used to place a bedpan under a patient on a mat or in a hospital bed?

   a. ______________________________

   b. ______________________________

10. If a male patient uses a urinal, what are two things you should you do after you dispose of the urine in a toilet bowl?

    a. ______________________________

    b. ______________________________

Lesson 3: Assisting the Patient with Comfort and Self-Care

Clinical/Laboratory Activity Sheet

1. Ask your clinical supervisor to demonstrate the procedures presented in this lesson. Then practice the following activities with a physical therapy student if the class is large enough. If not, ask any health-related occupations student. Rotate role-playing the patient and the health care worker.

    a. Practice helping a patient (who is sitting in a wheelchair) put on a hospital gown. Have your partner act as if one arm is paralyzed. Have your partner act as if he or she cannot see well. Have your partner act as if he or she cannot hear well.

    b. Practice putting a robe or a hospital gown (backwards) on your partner while he or she is sitting in a wheelchair.

    c. Practice rolling a patient on and off of a bedpan. Use either a treatment table or a mat as the surface. Try both a regular bedpan and a fracture bedpan.

    d. Practice helping the patient put on and take off his or her shoes and socks. Practice doing this with a shoe spoon.

    e. Help the patient (who is wearing shorts) put on slacks or pajama bottoms while lying on a mat, then while sitting in a wheelchair positioned in front of the parallel bars.

    f. Practice helping the patient transfer from a wheelchair to a toilet. Hand the patient an appropriate amount of toilet paper. Plan and discuss what you would do if the patient is unable to wipe without assistance. As a reminder, both patient and aide must wash their hands when finished.

    g. Working in pairs, tape a piece of rubber tubing to the arm of the patient who is sitting in a wheelchair and fasten the other end (the bag) to an IV pole. The aide must put a gown on the patient without letting the bag end of the tube drop below the patient's shoulder. Then, remove the gown.

2. After completing the activities in number one, make a list of steps or techniques that you feel were particularly difficult. Go over this list with your classroom instructor and clinical supervisor.

3. After obtaining your clinical supervisor's approval, assist patients with dressing and undressing and with using urinals and bedpans.

Unit Checklist

Student Name ________________________ Overall Unit Rating ______

Activity Sheet: Techniques for Interacting with Patients Rating ______

Comments: ________________________

Clinical/Laboratory Activity: Techniques for Interacting with Patients Rating ______

Comments: ________________________

Activity Sheet: Lines, Tubes, Bags, and Wound Dressings Rating ______

Comments: ________________________

Clinical/Laboratory Activity: Lines, Tubes, Bags, and Wound Dressings Rating ______

Comments: ________________________

Activity Sheet: Assisting the Patient with Comfort and Self-Care Rating ______

Comments: ________________________

Clinical/Laboratory Activity: Assisting the Patient with Comfort and Self-Care Rating ______

Comments: ________________________

Skill Sheet: Assist Patient in Changing Clothes Before Treatment Rating ______

Skill Sheet: Assist Patient in Changing Clothes After Treatment Rating ______

Skill Sheet: Assist Patient in Using Bedpan on Mat Rating ______

Skill Sheet: Assist Patient to Use Urinal (Lying Down) Rating ______

Written Unit Evaluation **Score** ______

Additional Comments: ______________________________

____

____

Teacher Signature ______________________ **Date** ______________

Student Signature ______________________ **Date** ______________

Unit III

Patient Mobility

Patient mobility is at the center of physical therapy. Watching patients begin to regain the ability to move about safely is one of the most exciting aspects of physical therapy.

The physical therapist aide often helps patients transfer from beds to wheelchairs and back. Aides also transfer patients to and from exercise mats and other equipment.

In this unit the aide will learn techniques to perform these activities safely to avoid injuring the patient, co-workers, or himself or herself. The physical therapist aide will also learn the methods most frequently used to transfer patients.

Unit Lessons

Safety

Transfers

Lesson 1:
Safety

Objectives:

A. Identify principles of good body mechanics.

B. Describe how to prepare to help a patient move.

C. Identify parts of a wheelchair.

D. Identify precautions when transporting patients.

Key Terms:

- Body mechanics
- Manual wheelchair
- Electric wheelchair
- Gurney
- Restraint

Safety is vital to the physical therapist aide, patients, and others, whether in the physical therapy clinic or elsewhere. Understanding how to prevent accidents and injury is important in all aspects of life, but it is particularly important when one person is dependent upon another for assistance. This lesson will describe personal safety, patient safety, and safety of other caregivers assisting in a transfer.

Principles of Body Mechanics

Body mechanics means effective use of the body to move objects and people without causing injury. Good body mechanics has to do with how to position your body to safely move a patient or an object. Use correct body mechanics to protect the patient, to protect the caregiver, and to save energy, which prevents fatigue. Principles of body mechanics include the following points:

- Place the feet apart to provide a wide base of support.
- Hold the load (objects) close to your body.
- Keep the back straight
- Tighten lower back and abdominal muscles.
- Bend hips and knees and lift with the legs.
- Avoid twisting the spine during the lift, pivoting the feet instead.
- Lift in a smooth motion.
- Avoid lifting items overhead.

Figure 1.1 on the following page illustrates the use of good body mechanics.

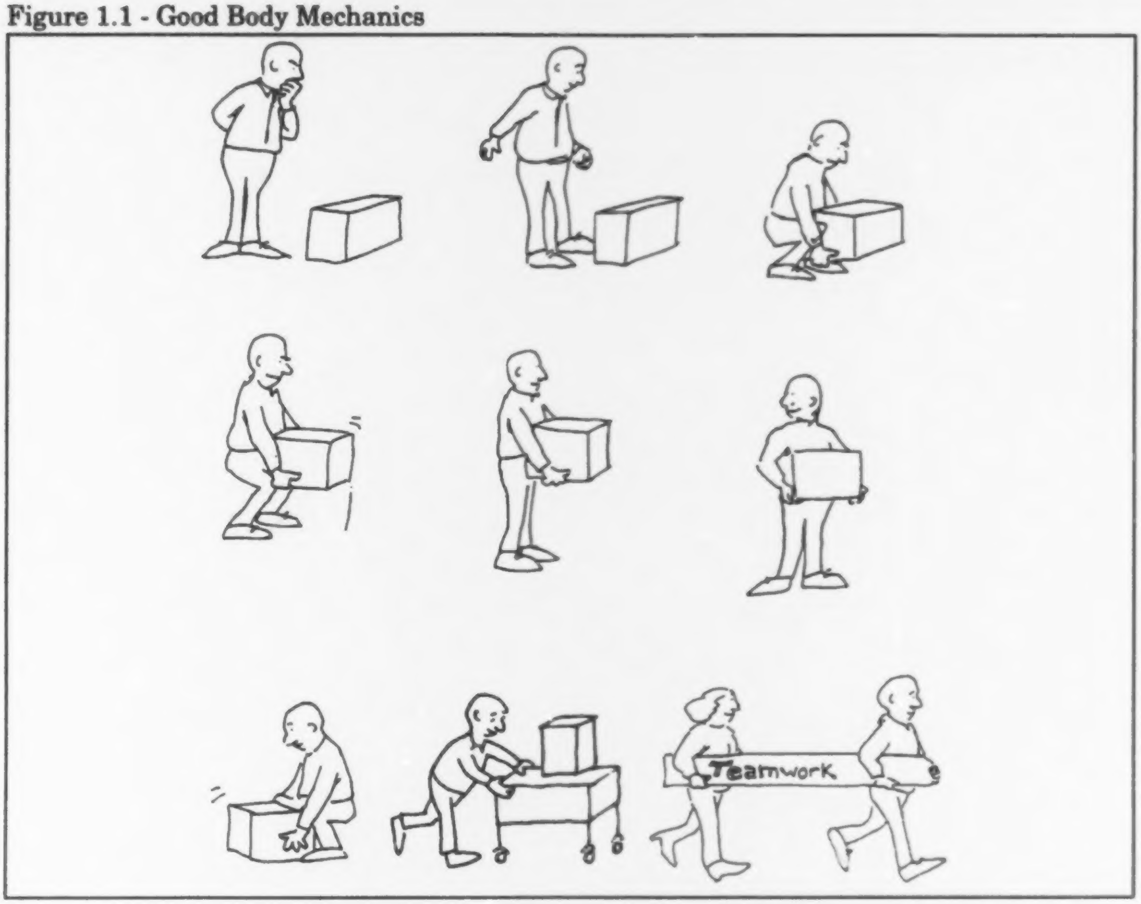
When the hips and knees are bent and the feet are shoulder width apart, you are more stable and it is easier to maintain balance. It is easier to knock over a tall, narrow object than a low, wide object.

Rather than lifting, it may be better to scoot or slide a heavy object or use a cart. If you must pick something from the floor, bend at the hips and knees rather than bending from the waist to reach it, no matter how heavy the object. The back can be injured by bending over to pick up a pencil. Remind others to use good body mechanics, too.

Lifting Technique

Good timing is important when you are lifting a heavy object with someone else or are helping a patient transfer. Plan to use a count followed by a command (e.g., 1, 2, 3, lift) and make sure everyone knows to move on the command. Have one person give commands. Look where you are going, not where you have been. Straighten your back completely when finished lifting. This ensures that you move together smoothly as

Figure 1.1 - Good Body Mechanics



a team. Good timing helps prevent accidents and makes the transfer easier for everyone. Good timing in a transfer is like good timing when you tell a joke--if the timing is off, it isn't funny for anyone!

Preparing for the Lift

STOP
- Plan ahead.
- Have everything you need.
- Have an alternate plan if something goes wrong.

LOOK
- Size up the situation.
- Check to see if the floor is slick.

LISTEN
- Communicate with your partner or patient.
- Listen to your own common sense.

ACT
- Clear the area.
- Block equipment.

Getting Ready

You must plan ahead before you lift a heavy object or help a patient move. Think through what you are going to do. Decide if you can do the work yourself or if you need assistance. Have all the equipment you need. Make all preparations before you do the actual lift.

If the lifting task involves a patient, tell the patient what you are going to do. A physical therapy patient should usually be allowed to do as much of the work as possible, but you must be ready to take over for the patient if he or she becomes unsteady and begins to fall.

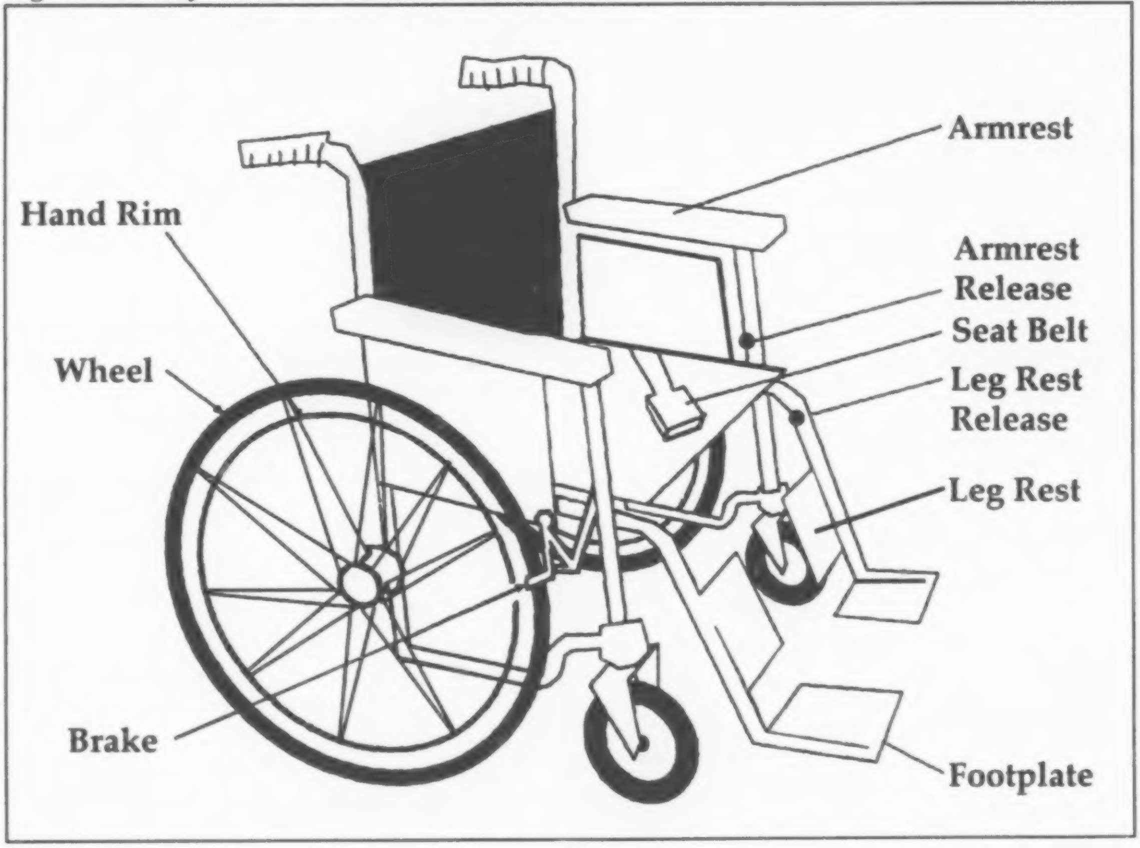
Clear the area of unnecessary objects. Check the floor to see how slick it is; be sure it is dry. Block furniture or equipment that is likely to move. Be sure equipment does not move by locking wheels on wheelchairs, gurneys, etc.

Wheelchair Parts

Before learning how to move patients from place to place, it is important to know the parts of a wheelchair. The most frequent transfers called for in physical therapy involve a wheelchair. Figure 1.2 shows the key parts of a **manual wheelchair** (operated by hand).

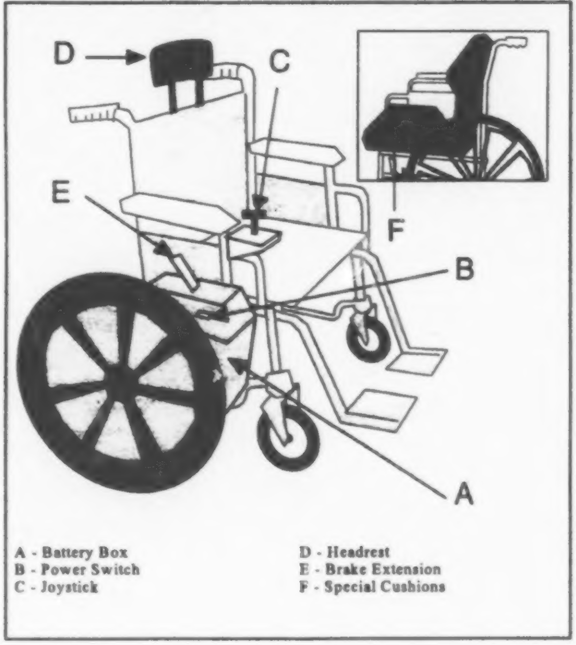
Most wheelchairs have detachable parts that can be placed out of the way during a transfer. Footplates on all wheelchairs can be turned up. Removable armrests and leg rests are also common. Some wheelchairs have removable brake extensions, food trays, headrests, or backrests. If wheelchair parts are removed for a transfer, be sure they are placed where no one will stumble over them during the transfer. After the transfer, carefully replace the part and make sure it is locked in place. If a part of the wheelchair is not working properly, report it to the patient's therapist.

Figure 1.2 - Key Parts of a Manual Wheelchair



An **electric wheelchair** with a battery and motor (Figure 1.3) is used by people who have medical conditions causing permanent muscle weakness or incoordination. The electric wheelchair makes it possible for them to move about independently. Special features on an electric wheelchair not normally found on a manual wheelchair include: the battery box, the power switch, the joystick, the headrest, the brake extension, and special cushions for patients who spend a great deal of time in a wheelchair or who have poor sensation.

Figure 1.3 - Key Parts of an Electric Wheelchair



If the patient has lines or tubes, place the equipment so it will not be pulled during the transfer. For your safety, you should not let the patient hold on to you. It is particularly important that you not allow a patient to hold you around the neck. This can cause severe neck or back injury because it shifts your center of balance and might cause you to lose control of the transfer patient. Under some circumstances, it is all right for a very weak patient to place his or her arms around a caregiver's shoulders.

Precautions for Transporting Patients

Most patients are alert, cooperative, and can be depended upon to stay safely seated in their wheelchairs or lying on a **gurney** (a stretcher on wheels). However, there are some situations where it is important that you secure the patient to prevent injury while you are moving the wheelchair or gurney.

When you are responsible for a patient in a wheelchair or on a gurney, you must be sure the patient does not fall. Follow instructions regarding safety for each patient.

When transporting a patient on a gurney, stand at the patient's head, then push the gurney with the patient's feet leading. If the patient is lying on the gurney, the side rails must be up whenever the patient is moved.

Seat belts/ safety belts - The patient who is very weak or who has a problem with balance often needs to have a wheelchair with a seat belt. The seat belt provides support so the patient does not tip forward out of the chair. A seat belt fastens in the front so that the patient is able to remove it. Since the patient can remove the seat belt, it is not considered a restraint. A gurney may also have a safety belt to be used during transportation. Again, if the patient is able to remove it, the safety belt is not considered a restraint.

Restraints - A **restraint** is anything that is used to prevent a patient from harming himself or herself and that cannot be removed by the patient. Belts, straps, harnesses, and trays that fasten behind a wheelchair or under a gurney where the patient cannot loosen them are examples of restraints. Even a chair that tips a person backward is considered a restraint.

If a patient is confused or disoriented, the physician may order restraints. Cloth devices are used in addition to the side rails of the hospital bed to keep the patient from climbing out and falling. Restraints must be placed so the patient cannot unfasten them, but the restraints must be loosened or released regularly.

The rules about restraints apply to children as well as adults. A child may try to stand up on a wheelchair or gurney. The child must sit in a wheelchair or sit or lie on a gurney. It is permissible for a small child to sit up on the gurney unless the physician's orders state the child must be transported lying down. Check with the child's physical therapist for proper position before transporting.

Doorways - When passing through a doorway, be sure the patient's arms and legs will not hit the door frame. Be certain that automatic sliding doors or elevator doors will not close on the patient's wheelchair. Back through an automatic closing door to keep it open and pull the patient in the wheelchair or gurney through behind you.

Curbs - When you move a patient outside by wheelchair, special precautions must be followed. If you go *down* the curb, (1) you *back* the wheelchair, (2) gently lower the large wheels first, (3) rotate the chair a quarter turn, and (4) lower the small front wheels. To go *up* a curb with a wheelchair, (1) approach the curb with the *front* of the wheelchair, (2) tip the chair back slightly to raise the front wheels, and (3) lift as you push the back wheels up the curb.

Ramps - Always push a wheelchair forward up a ramp. Back the wheelchair down a ramp, going down first and bringing the wheelchair along behind you. Both of these positions keep the patient leaning backward in the chair instead of tipping forward.

Elevators - Back a wheelchair into and out of an elevator whenever possible. This keeps the small front wheels from dropping into the space between the elevator and the floor. If a small wheel gets caught, it abruptly stops the wheelchair and could hurt the patient or caregiver. Backing in and out of an elevator also helps protect the patient from accidentally running into someone, especially when you exit the elevator. If an elevator is very crowded, it is best to wait for another one.

Push a gurney into an elevator with the patient's feet leading. Back the gurney out with the patient's head first. Always stand at the patient's head.

Stairs - Never attempt to take a patient in a wheelchair up or down the stairs. In a fire emergency, however, two caregivers can carry a patient up or down the stairs in a wheelchair by holding onto the frame.

Test Your Knowledge. Complete the following activity sheet and the clinical/laboratory activity sheet to test your knowledge and understanding of materials you have studied in this lesson.

Lesson 1: Safety

Activity Sheet

1. List the eight principles of good body mechanics.
   a. ____________________
   b. ____________________
   c. ____________________
   d. ____________________
   e. ____________________
   f. ____________________
   g. ____________________
   h. ____________________
2. How can you ensure good timing when two or more people are involved in a transfer?

   ____

   ____
3. Why are good body mechanics and lifting techniques important?

   ____

   ____
4. What are the guidelines used to prepare for a lift or to move a patient?

   ____

   ____

   ____

   ____

   ____
5. What is the difference between a wheelchair seat belt and a restraint?

   ____

   ____
6. Describe the safest way to transport a patient in a wheelchair:
   a. On and off of an elevator____________________

   ____

   ____

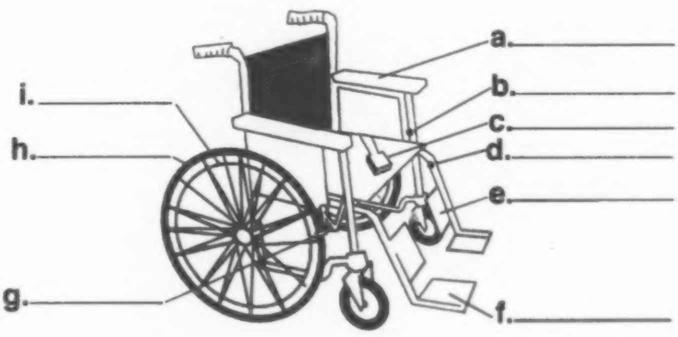
b. Up a curb ____________________

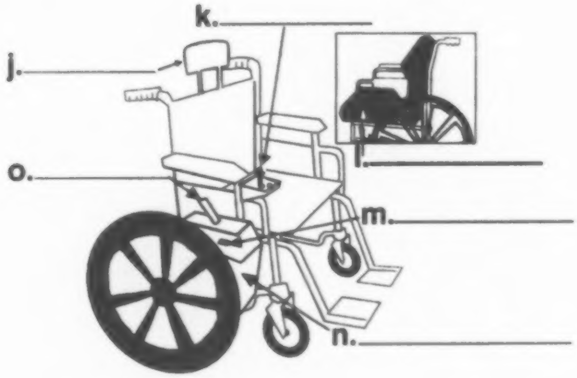
c. Down a curb ____________________

7. Which parts of a wheelchair might be removable?

8. What is the proper procedure for moving a gurney on and off an elevator?

9. Label the parts of the wheelchairs.





Lesson 1: Safety

Clinical/Laboratory Activity Sheet

1. Observe the activities in your clinical setting. Watch how the staff and patients move. Identify situations where good body mechanics, in contrast to poor body mechanics, are being demonstrated. Discuss your findings with your clinical site supervisor or classroom instructor.

2. Sometimes it is difficult to perform activities with perfect body mechanics. What activities at your clinical site do you anticipate are going to hinder the principles of good body mechanics? What might do you to reduce the chance of injury? Discuss your findings with your clinical site supervisor or classroom instructor.

3. At your clinical site, with permission from your clinical site supervisor, find as many different types of wheelchairs as possible. Become familiar with the different models by removing and replacing the removable parts.

4. Practice fastening a wheelchair seat belt around a classmate.

5. Have a classmate put a restraint on you and see if you can get loose.

6. Practice pushing a wheelchair up and down a curb; when going down the curb, be sure to rotate the chair to one side (once back wheels are down) to lower the front wheels.

7. Practice taking a wheelchair up and down a ramp.

8. Practice taking a wheelchair on and off of an elevator.

9. Practice taking a wheelchair through a swinging door.

10. Practice taking a gurney on and off of an elevator and through an automatic door.

Lesson 2:
Transfers

Objectives:

A. Identify types of transfers.

B. Supervise independent transfer.

C. Perform one-person sitting transfers.

1. Stand and pivot transfer
2. Swing transfer
3. Sliding board transfer

D. Transfer patient from gurney to treatment table.

1. Sliding transfer
2. Three-person carry transfer

E. Perform two-person sitting transfer.

F. Transfer patient using a mechanical lift.

Key Terms:

- Transfer
- Independent transfer
- Dependent transfer
- Active-assisted transfer
- Passive-assisted transfer
- Transfer (gait) belt
- Transfer sheet
- Mechanical lift

Types of Patient Transfers

The physical therapist aide frequently helps patients transfer. In physical therapy, the term **transfer** is used to mean the act of moving a patient from one place to another. Examples of patient transfers include helping the patient move from the bed to a wheelchair, from a wheelchair to an exercise mat, or from a gurney to the treatment table.

Transfers from bed to wheelchair will be described as a standard procedure. Similar procedures are used to transfer from surfaces such as exercise mats or treatment tables. Transfers are much safer and easier if the two transfer surfaces are nearly the same height. Transfers to surfaces of different heights are often more difficult and require greater assistance.

A transfer that can be accomplished by the patient without any direct assistance from someone else is called an **independent transfer**. A **dependent transfer** is one that requires a helper's assistance.

A dependent transfer in which the patient is able to help is an **active-assisted** transfer. The **passive-assisted transfer** occurs when the patient is completely dependent upon others to do the work. Dependent transfers may require only one helper, depending on the conditions and type of transfer. However, a transfer may require two or more caregivers to safely move the patient.

There are many varieties of transfers in addition to the ones presented here. For example, a patient may learn to transfer from wheelchair to the floor and back, or a patient may need help transferring into a bathtub or a car. When unusual transfer situations occur, ask the patient's therapist how you should assist.

Supervising an Independent Transfer

The patient's therapist will determine whether the patient is able to transfer independently. Patients who have adequate balance and strength will be able to transfer independently. The aide frequently encounters patients who need no assistance to transfer. Patients who can walk short distances but fatigue easily often need a wheelchair to get from place to place. It is helpful to the recovery process if the patient is allowed and encouraged to do as much as possible without direct assistance. For the independent transfer, the aide can bring the wheelchair to the patient, lock it, make sure the area is clear, and stand by in case the patient needs help (e.g., the wheelchair starts to slip). The basic procedure for supervising an independent transfer is discussed below.

Patients should always have on shoes with nonskid soles before beginning a transfer.

Position the wheelchair for the patient. Place the wheelchair so that the wheels are almost parallel to the bed, with the front of the chair at a slight angle toward the patient's preferred or strong side. Lock the wheels and raise the footplates of the wheelchair.

A patient who is strong enough to transfer independently will usually prefer both armrests left on the wheelchair to grasp with both hands for additional support. This allows the patient to sit down slowly and carefully without the aide's assistance.

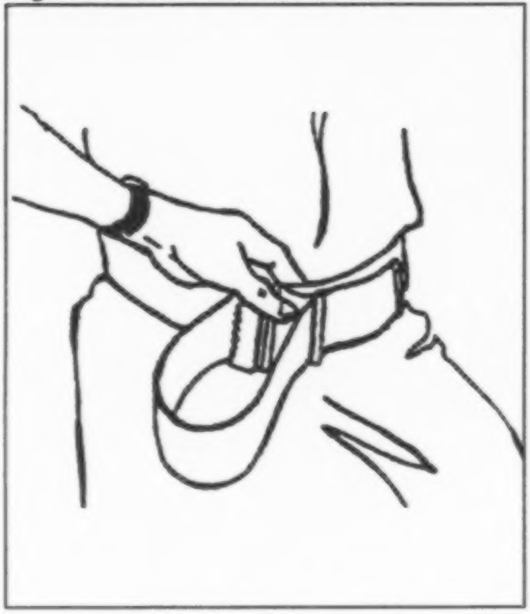
The well-oriented patient who can transfer independently will usually not require a wheelchair safety belt for transportation, but it is generally advisable to have the patient fasten the belt if the wheelchair has one.

One-Person Sitting Transfers

There are three types of one-person sitting transfers: the stand and pivot, the swing, and the sliding board. Each of these will be described and illustrated as dependent transfers, although patients often learn to do these independently.

For all dependent transfers a **transfer belt** should be put on. A transfer, or gait, belt is a thick belt placed around the patient's waist and used by the caregiver to assist in moving, transferring, or ambulating the patient (Figure 2.1). If the patient refuses the transfer belt, have the patient return to a safe position and check with the patient's therapist before you attempt the transfer without the belt.

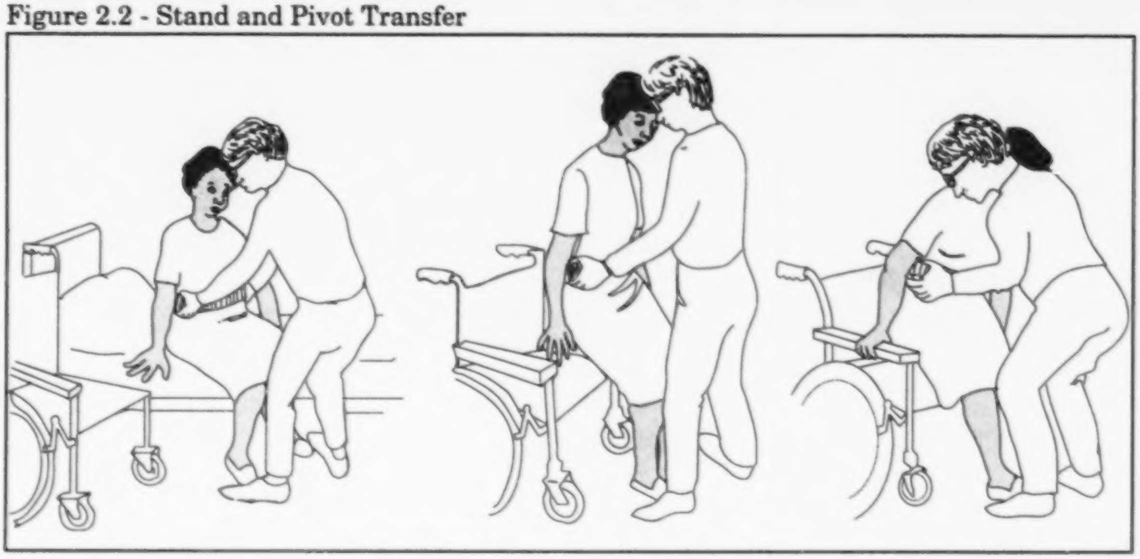
Figure 2.1 - Transfer (Gait) Belt



Stand and Pivot Transfer

The stand and pivot transfer (Figure 2.2) requires varying amounts of assistance, from minimal to considerable assistance. If

Figure 2.2 - Stand and Pivot Transfer



there is any question of whether the transfer can be accomplished by one person, the aide should ask for assistance. The position of the wheelchair relative to the bed or table can vary depending upon whether one or two persons are assisting. The 45° angle provides space for the second helper. During the transfer, instruct the patient about each step in the procedure so that you can coordinate your efforts and so that the patient can learn to transfer more independently in the future.

An independent patient can use a wheelchair with fixed arms that cannot be removed. However, a dependent patient should have a wheelchair with removable armrests. Before the transfer, remove the armrest nearest the patient. The opposite armrest should be left in place for safety and so the patient can grasp it for additional support as much as possible. If the near armrest is not removed, the dependent patient might be bruised or might fall while attempting to get up and over the armrest. If a dependent patient must be transferred into a wheelchair that does not have a removable armrest, at least two helpers will be required.

You must use good body mechanics during the transfer. *Do not let the patient hold on to your neck or arms.* Rather, the patient should use his or her hands to push off from the surface and reach for the chair arm before sitting down. The only time a patient may have his or her arms on the shoulders of the caregiver is when the patient is very weak or paralyzed.

Steps of Procedure for Stand and Pivot Transfer (Active-Assisted):

1. Wash your hands.

2. Assemble necessary equipment.

3. Identify and greet patient. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. If at bedside, adjust bed height to low position. Lock brakes of bed.

7. Assist patient to move to within five or six inches of the edge of the bed.

8. Assist in putting on socks and nonskid shoes.

9. Position wheelchair on patient's strong side if indicated; if not, position wheelchair as desired.

10. Place wheelchair parallel to or at a 45° angle to the bed.

11. Lock the wheels of the wheelchair.

12. Cover wheelchair with bath blanket and/or protective pad. Raise footplates and remove if possible. Remove the armrest on the side next to the bed.

13. Assist the patient to sit up.

    a. Prepare to follow principles of good body mechanics for lifting.

    b. Put one forearm under patient's shoulders and the other behind the knees.

    c. Bend your knees, keep your back straight, and stand with feet about 18 inches apart.

    d. Straighten your hips and knees while shifting weight from front foot to back foot. At the same time, lift patient's head-neck with one arm while pulling the legs over the side of bed with other arm.

14. Apply transfer belt.

15. Allow the patient time to adjust to being in a sitting position before you proceed. Assist the patient in maintaining a sitting position as needed.

16. Place hands underneath belt along the patient's side with palms up.

17. Instruct patient to stand on the count of three.

18. Assist patient to stand and support the weak leg with your knee, if indicated.

19. Instruct patient to reach with his or her strong hand and grasp for the far armrest of the chair.

20. Assist the patient to pivot toward his or her strong leg by turning your own body. Do not twist; turn your body as a unit.

21. Gently assist patient to sit by bending your knees while keeping back straight.

22. Replace wheelchair parts and make sure they are secure.

23. Help patient move back in wheelchair, straighten the seat cushion and patient's clothing, and fasten seat belt.

24. Position the weak arm and leg properly on the armrest and footplate. A pillow may be used to support the weak arm.

25. Wash your hands.

Steps of Procedure for Stand and Pivot Transfer (Passive-Assisted):

1. Wash your hands.

2. Assemble necessary equipment.

3. Identify and greet patient. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. If at bedside, adjust bed height to low position. Lock brakes of bed.

7. Assist patient to move to within five or six inches of the edge of the bed.

8. Assist in putting on socks and nonskid shoes.

9. Position wheelchair on patient's strong side if indicated; if not, position wheelchair as desired.

10. Place wheelchair parallel to or at a 45° angle to the bed.

11. Lock the wheels of the wheelchair.

12. Cover wheelchair with bath blanket and/or protective pad. Raise footplates and remove if possible. Remove the armrest on the side next to the bed.

13. Assist the patient to sit up.

    a. Prepare to follow principles of good body mechanics for lifting.

    b. Put one forearm under patient's shoulders and the other behind the knees.

    c. Bend your knees, keep your back straight, and stand with feet about 18 inches apart.

    d. Straighten your hips and knees while shifting weight from front foot to back foot. At the same time, lift patient's head-neck with one arm while pulling the legs over the side of bed with other arm.

14. Apply transfer belt.

15. Allow the patient time to adjust to being in a sitting position before you proceed. Assist the patient in maintaining a sitting position as needed.

16. Stand directly in front of the patient, grasp the back of the belt.

17. Support the patient's knees and feet with your knees and feet, either knee-to-knee or your knees on the sides of the patient's knees, whatever is comfortable for you and the patient.

18. Have the patient lean forward while sitting on the edge of the bed.

19. On the count of three, have the patient push up as much as possible while you pull him or her up by straightening your legs and hips and holding onto the belt.

20. Pivot your entire body as well as the patient's.

21. Lower the patient into the wheelchair by bending at your knees and hips as the patient sits down.

22. Replace wheelchair parts and make sure they are secure.

23. Help patient move back in wheelchair, straighten the seat cushion and the patient's clothing, and fasten seat belt.

24. Adjust footplate for patient; cover with a lap robe.

25. Position pillow(s) to provide proper body alignment and joint support.

26. Wash your hands.

The process is reversed to transfer the patient back out of the wheelchair, except that the patient pushes up on the arm of the wheelchair instead of the bed. Remember to remove the near armrest of the wheelchair.

Swing Transfer

A dependent swing transfer is similar to an active-assisted stand and pivot transfer except that it is accomplished much more quickly and the patient does not stand up completely. Instead, momentum of the swing is used to move the patient from place to place. A wheelchair with a removable armrest must be used.

Steps of Procedure for Swing Transfer:

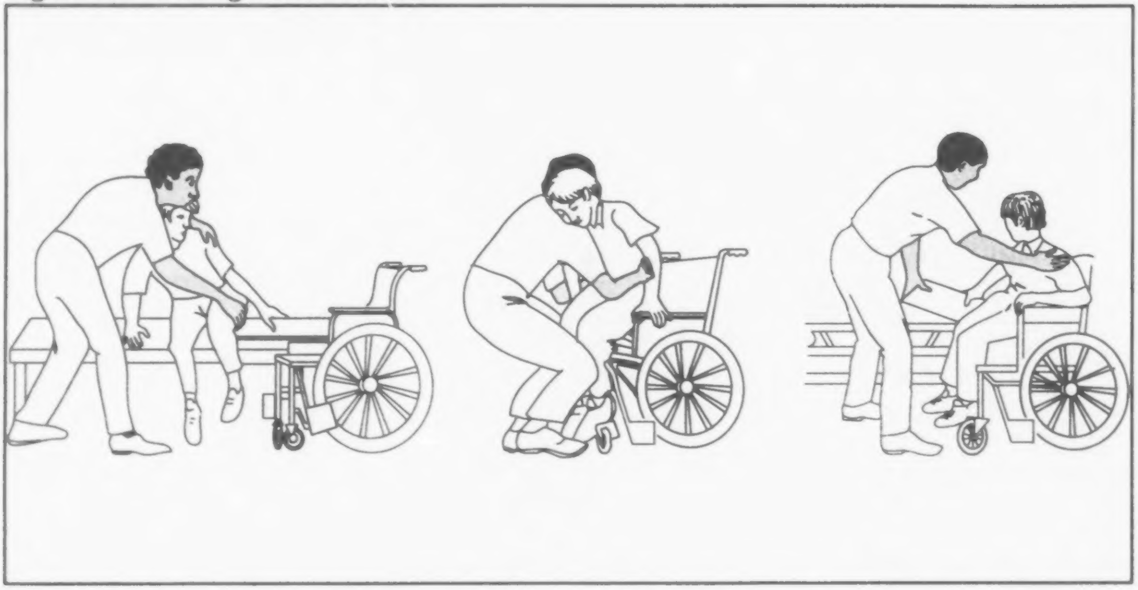
1. Wash your hands.
2. Assemble necessary equipment.
3. Identify and greet patient. Identify self.
4. Explain to the patient that you are about to assist with the transfer.
5. Provide privacy.
6. Position the wheelchair to the patient's strongest/preferred side.
7. Lock the wheels on the wheelchair.
8. Remove both leg rests and the armrest nearest the patient; put them out of the way.
9. Help the patient sit up and slide forward. (While the patient's feet may be on the floor, little or no weight will be borne on them.)
10. Apply a transfer belt.
11. If possible, let the patient grasp the remaining armrest with one hand; the other hand should be ready to push down on the surface to help raise the body.
12. Grasp the patient's knees between your knees.
13. Hold the transfer belt with both of your hands at the patient's sides.
14. Ask the patient to bend forward and lower his or her head away from the seat of the wheelchair. Explain the count with command sequence; have the patient rock forward with each count.
15. On the command, using good body mechanics, lift the patient enough to clear the surfaces, directing his or her buttocks toward the seat of the wheelchair.
16. Help the patient move back in the wheelchair, straighten the seat cushion and patient's clothing, and fasten the seat belt.
17. Replace wheelchair parts and make sure they are secure.
18. Wash your hands.

The process is reversed to transfer the patient back out of the wheelchair, except that the patient reaches for the edge of the bed or mat instead of the wheelchair armrest.

Sliding Board Transfer

A sliding board transfer (Figure 2.3) is used for a dependent patient who is unable to stand at all, or is too weak or heavy to do a swing transfer. Because the patient who must have a sliding board to transfer tends to be very weak or have poor balance, you will have to be particularly careful not to allow him or her to fall from the sitting position. Be sure the patient has on clothing that will allow his or her hips to slide on the sliding board.

Figure 2.3 - Sliding Board Transfer



Steps of Procedure for Sliding Board Transfer:

1. Wash your hands.
2. Assemble necessary equipment.
3. Identify and greet patient. Identify self.
4. Explain the procedure to the patient.
5. Provide privacy.
6. Position the wheelchair at an angle next to bed or mat.
7. Lock the wheels on the wheelchair.
8. Remove both leg rests and the armrest nearest the patient.
9. Help the patient sit up and put on a transfer belt.
10. Have the patient lean away from the wheelchair by rolling up on his or her hips.
11. Slide the board as far under the patient's hips as possible. Be careful not to pinch the patient's buttocks. Use powder on the board or place a towel or pillowcase under the patient to reduce the chance of friction burns during the transfer.
12. Place the other end of the board on the wheelchair cushion, bridging just in front of the wheel of the wheelchair.
13. Have the patient reach for the armrest with the leading hand and try to push his or her body up and toward the wheelchair with the trailing hand.

    Note: The patient with very weak arms may place his or her arms on your shoulders, but you must never allow the patient to grasp you around your neck.
14. Steady the patient's knees between your knees.

15. Grasp the transfer belt with your hands and help the patient slide over to the wheelchair. The sliding process can be either slow or fast, much like the swing transfer. If necessary, this movement may be accomplished by several lift and slide motions.

16. Remove the sliding board.

17. Straighten the seat cushion and the patient's clothes, and fasten the wheelchair safety belt.

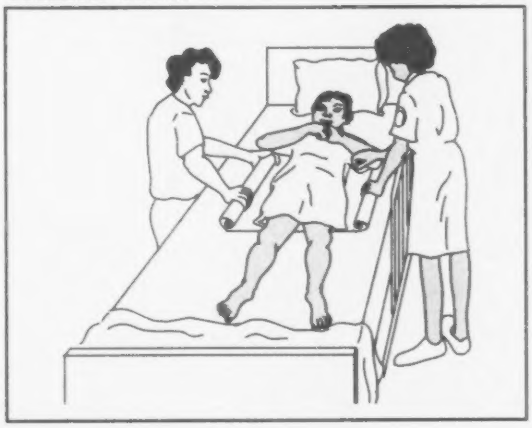
18. Replace the armrest and legrests and be sure they are secure.

19. Wash your hands.

Transferring from Gurney to Treatment Table

There are two ways to move an adult patient from a gurney to the treatment table. The same techniques can be used to move a patient from a bed to a treatment table or a tilt table. Both methods require two or more caregivers to safely perform the transfer.

Figure 2.4 - Positioning Patient with a Transfer Sheet



The first method involves sliding the patient on a transfer sheet from one surface to the other. The surfaces must be at almost the same height. The patient should be lying on a regular bed sheet or blanket. A second sheet, called a **transfer sheet**, or lift sheet, is often placed under the patient's body to help change the patient's position on the bed sheet (Figure 2.4). This transfer sheet is used to transfer the patient from one surface to another surface. Occasionally, a patient will be transferred on a thin mattress instead of a transfer sheet.

The second method requires the helpers to lift and carry the patient, a necessity if the two surfaces are not the same height. In each instance, the patient's body is kept straight, without bending at the neck, trunk, hips, or legs. If the patient has lines or tubing, be careful not to pull on them.

Steps of Procedure for Sliding Transfer from Gurney to Treatment Table:

1. Wash your hands.

2. Assemble necessary equipment.

3. Identify and greet patient. Identify self.

4. Explain the procedure to the patient.

5. Provide privacy.

6. Lock or block wheels of all equipment.

7. Line up the gurney parallel to the treatment table.

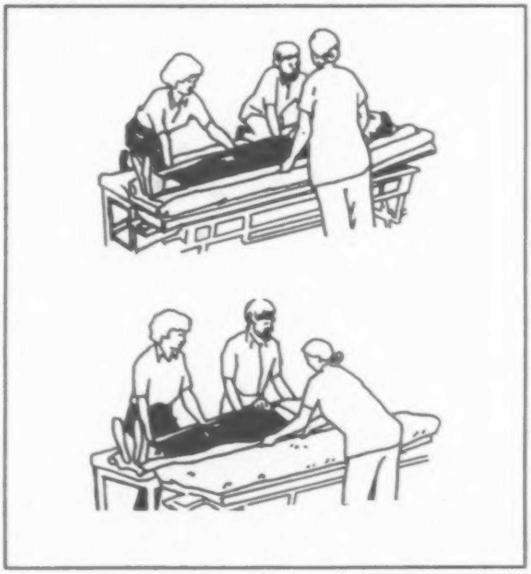
8. Fold or place patient's arms close to the body.

9. Remove pillows and be certain the patient's head or feet will not hit any obstacles during the transfer.

10. Two caregivers stand next to the treatment table and reach across it to grasp the sheet that is under the patient. They may place one of their knees on the table for better body mechanics.

11. A third caregiver stands on the far side of the gurney and grasps the sheet.

Figure 2.5 - Sliding Transfer from Gurney to Treatment Table



12. On the count of three with a command, the caregivers smoothly slide (lifting slightly to minimize friction) the patient from the gurney to the treatment table (Figure 2.5).

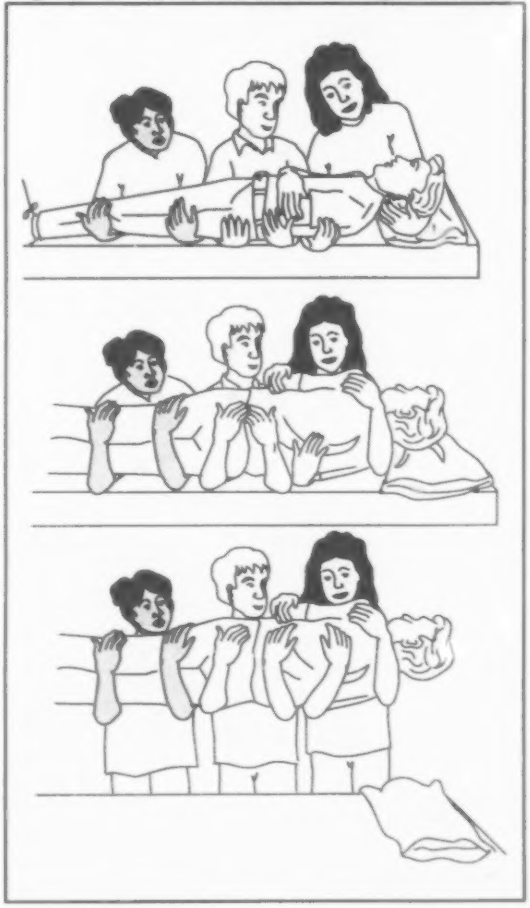
13. Replace pillows, cover the patient, straighten sheets, and put up gurney side rails.

14. Wash your hands.

Three-Person Carry Transfer

If the surfaces between transfers are of unequal height, the lift and carry type of transfer is necessary (Figure 2.6). This is also the rescue lift used to evacuate patients in emergency situations. There may be other instances where this type of transfer is preferred. For an adult patient, three caregivers are required. If the patient has IV lines or other equipment attached, an additional person may be necessary.

Figure 2.6 - Three-Person Carry Transfer



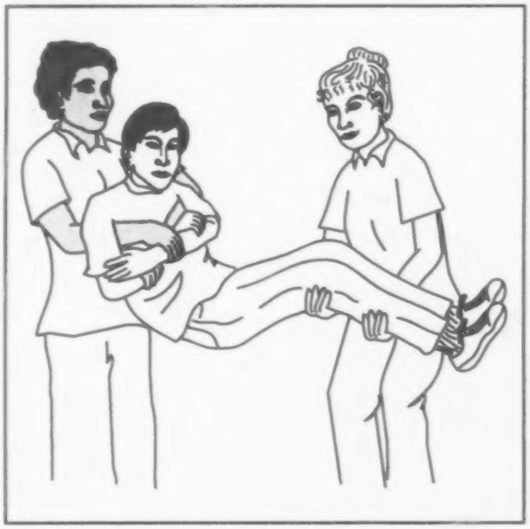
Steps of Procedure for Three-Person Carry Transfer:

1. Wash your hands.
2. Assemble necessary equipment.
3. Identify and greet patient. Identify self.
4. Explain the procedure to the patient.
5. Provide privacy.
6. Position treatment table and gurney at right angles, head to foot.
7. Lock and block wheels. Both treatment table and gurney should be placed against walls in a corner if possible.
8. Three caregivers line up along the side of the gurney. The tallest caregiver stands at the patient's head and gives the commands (Figure 2.6).
9. The caregivers bend their knees using good body mechanics and slide their arms under the patient. The commander's arms go under the patient's head and shoulders, the middle caregiver's arms go under the patient's back and hips, and the remaining caregiver's arms go under the patient's thighs and legs.
10. Using the count and command system, the caregivers slide the patient to the edge of the gurney.
11. On a second command, caregivers roll the patient toward their chests and lift the patient by straightening their knees.
12. On the third command, they walk to the treatment table and use good body mechanics by bending knees to lay the patient down.
13. The caregivers carefully remove their arms from under the patient.
14. The patient is positioned comfortably.
15. The caregivers should wash their hands.

Two-Person Sitting Transfer

If the patient needs to be transferred between two surfaces of unequal height, the two-person sitting transfer can be used (Figure 2.7). Examples of when to use this transfer include moving the dependent patient from the wheelchair to a treatment table or to the floor, and back to the wheelchair.

Figure 2.7 - The Two-Person Sitting Transfer



If the patient is particularly tall or heavy, or the caregivers are small, they may need additional help lifting the patient's lower body.

Steps of Procedure for Two-Person Sitting Transfer:

1. Wash your hands.
2. Assemble necessary equipment.
3. Identify and greet patient. Identify self.
4. Explain the procedure to the patient.
5. Provide privacy.
6. Position the wheelchair where the transfer is to take place and lock the wheels.
7. The taller or stronger helper usually stands at the patient's head and gives the commands. This helper reaches under the patient's arms from the back and grasps the patient's crossed wrists in preparation for the lift.
8. The other helper squats at the side of the patient's knees and reaches under the thighs and legs to lift the patient's lower body. Keep all clothing free of the wheelchair handles.
9. On a count of three and a command, both caregivers straighten up, lifting the patient up and out of the chair, making sure the patient's hips clear all obstacles.
10. On command, move the patient by walking or pivoting. Lower the patient to the surface by bending at the knees, using good body mechanics.
11. Position patient comfortably, straighten patient's clothing as necessary, or cover as appropriate.
12. Wash your hands.

Transferring with a Mechanical Lift

A **mechanical lift** is a hydraulic lift that allows an experienced person to transfer a dependent patient with relatively little effort. Until the aide becomes competent in transferring with a mechanical lift, he or she should secure the assistance of another caregiver. Since there are different brands of lifts, the aide should become familiar with the parts of the mechanical lift used at the work site. The common parts listed below are illustrated in Figure 2.8.

A. Spreader bar

B. Chain hook attachment site

C. Canvas sling

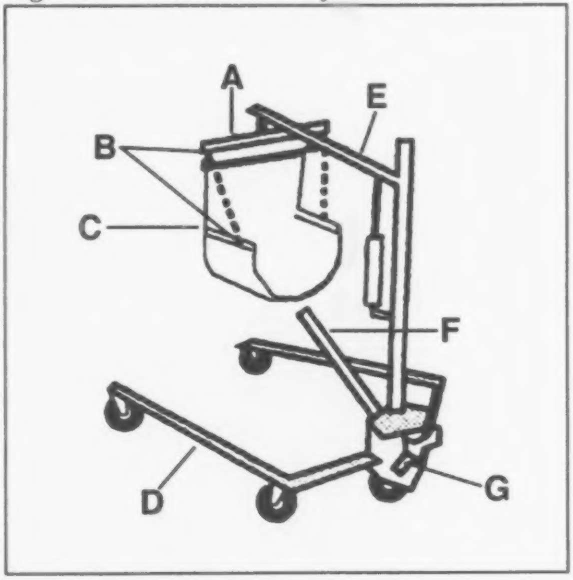
D. Base

E. Arm

F. Base positioning lever

G. Hydraulic release lever

Figure 2.8 - Mechanical Hydraulic Lift



The legs forming the base of the mechanical lift can be positioned closer or farther apart to slide under a bed or around a wheelchair. The canvas seat is attached to the lift so that the patient is lifted in a sitting position.

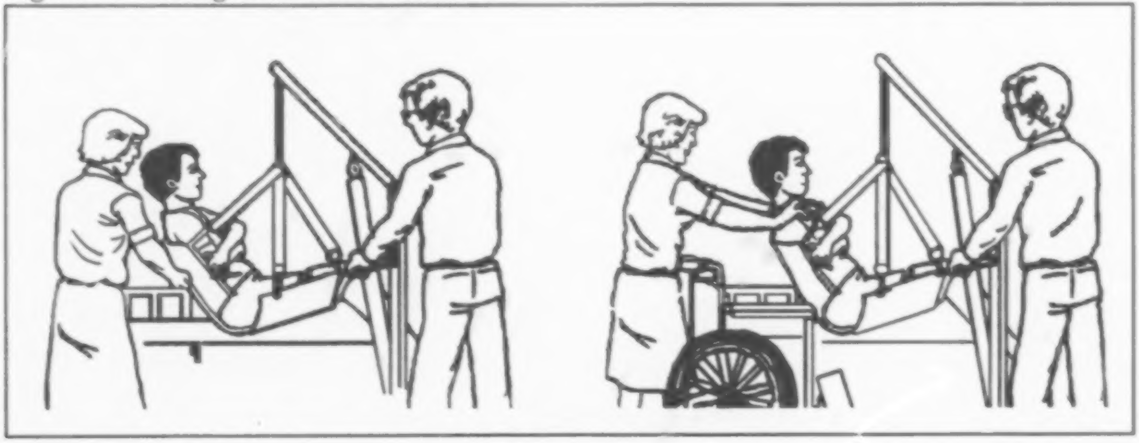
A mechanical lift makes a transfer of a dependent patient safe for both patient and caregiver if the equipment is used correctly. The patient, who is lying on a mat or bed, can be lifted into a sitting position by using a canvas sling attached by chains to the hydraulic lift.

Different types of mechanical lifts are available, but their operations are similar. The procedure is reversed to move the patient back to bed.

Steps of Procedure for Transferring with a Mechanical Lift:

1. Secure the assistance of another caregiver.
2. Wash your hands.
3. Assemble necessary equipment.
4. Identify and greet patient. Identify self and other assistant.
5. Explain what you are going to do.
6. Provide privacy.
7. Position wheelchair next to treatment table with the back of wheelchair in line with the end of the table.
8. By turning the patient from side to side on the table, you can slide the sling under the patient. Make sure the top of the sling is at the crest of the shoulders and the bottom is above the bend of the knees.
9. Wheel the lift into place over the patient with the base beneath the table and be sure to lock the wheels of the lift.
10. Attach the sling to the mechanical lift with the hooks in place under the metal frame. Be sure to apply hooks with open, sharp ends away from the patient to avoid injury.
11. Have the patient fold both arms across chest, if possible, or place in lap.
12. Using the crank, lift the patient until the buttocks are clear of the bed. Make sure the patient is aligned in the sling and is securely suspended in a sitting

Figure 2.9 - Using the Mechanical Lift



position with legs dangling over the bottom of the sling.

13. One caregiver should guide the patient's legs over the edge of the table; release brakes on mechanical lift.

14. Move the lift away from the table, turn the patient so that he or she faces you while the other caregiver guides the patient's body toward the wheelchair by standing behind the patient.

15. Open the support legs of the lift with the control lever, then bring the lift into position so that the patient is over the seat of the chair.

16. Release the control knob slowly so that the patient will gradually be lowered into wheelchair.

17. Remove the hooks from the frame of the lift. Leave sling under patient.

18. Cover patient with lap robe.

19. Secure the patient to the wheelchair with safety restraint if ordered.

20. Make the patient comfortable.

21. Store lift properly until time to transfer patient again.

22. Wash your hands.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

After you have completed the activity sheets and clinical/laboratory activities, you may take the written evaluation for this unit. A score of at least 80 percent indicates that you may proceed to the next unit. Check with your clinical supervising staff member for skill testing.

Lesson 2: Transfers

Activity Sheet

1. If you have a patient who can walk without assistance, what kind of transfer would you use?

   ____

2. In a three-person carry transfer, what is the unique responsibility of the caregiver who stands at the patient's head?

   ____

3. What is the purpose of a transfer belt?

   ____

   ____

   ____

4. An active-assisted transfer is a(n) ____________________ transfer in which the patient is able to help.

5. In a(n) ________________________ transfer, the patient is completely dependent upon others during the transfer.

6. What is a transfer sheet? ________________________________

   ____

7. When performing a stand and pivot transfer for a dependent patient in a wheelchair with removable armrests, why should you remove the near armrest?

   ____

   ____

   ____

Lesson 2: Transfers

Clinical/Laboratory Activity Sheet

1. If there is a mechanical lift at your clinical site, get permission from your supervisor to practice moving it from place to place and raising and lowering it.

2. Complete the following activity to learn to lift using good body mechanics. You will need a large, oblong cardboard box, two 10-pound sandbags, and a table. The activity should first be completed by one student alone, then by two students working as a team. For the one student lifting alone, place the box containing one sandbag on the floor near the table. The student should lift and place the box on the table using good body mechanics. Next, place two sandbags in the cardboard box. Have the box some distance from the table. Now, two students should lift together and place the box on the table using good body mechanics and a system of commands. Did you have any difficulties working as a team and working on command?

3. Ask your clinical supervisor to demonstrate the transfers in this lesson. Practice these transfers with the help of your clinical supervisor or classmates. Alternate between role-playing the patient and physical therapist aide.

   A. Independent transfer

   B. One-person sitting transfers

      1) Stand and pivot transfer

      2) Swing transfer

      3) Sliding board transfer

   C. Transferring from gurney to treatment table

      1) Sliding transfer

      2) Three-person carry transfer

   D. Two-person sitting transfer

   E. Mechanical lift transfer

Unit Checklist

Student Name______________________________ Overall Unit Rating ______

Activity Sheet: Safety Rating ______

Comments:____

____

____

Clinical/Laboratory Activity Sheet: Safety Rating ______

Comments:____

____

____

Activity Sheet: Transfers Rating ______

Comments:____

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____

Clinical/Laboratory Activity Sheet: Transfers Rating ______

Comments:____

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____

Skill Sheet: Perform a Stand and Pivot Transfer (Active-Assisted) Rating ______

Skill Sheet: Perform a Stand and Pivot Transfer (Passive-Assisted) Rating ______

Skill Sheet: Perform a Swing Transfer Rating ______

Skill Sheet: Perform a Sliding Board Transfer Rating ______

Skill Sheet: Perform a Sliding Transfer from Gurney to Treatment Table Rating ______

Skill Sheet: Perform a Three-Person Carry Transfer Rating ______

Skill Sheet: Perform a Two-Person Sitting Transfer Rating ______

Skill Sheet: Perform a Mechanical Lift Transfer Rating ______

Written Unit Evaluation Score ______

Additional Comments:____

____

____

Teacher Signature______________________________Date______________

Student Signature______________________________Date______________

Unit IV

Assisting with Treatment

After completing this unit, you should be able to assist with thermal therapies, hydrotherapies, electrotherapies, and mechanical traction. You will also be able to set up and take down exercise equipment. Positioning and draping techniques are presented as separate lessons to assist the learner in mastering these techniques.

Unit Lessons

Positioning

Draping

Assisting with Treatment

Lesson 1:
Positioning

Objectives:

A. Identify positions for treatment.

B. Identify positioning aids and equipment.

C. Move/assist patient to head of mat or treatment table.

D. Move patient to one side of mat or treatment table.

E. Place patient in supine position for treatment.

F. Place patient in side-lying position for treatment.

G. Place patient in prone position for treatment.

Key Terms:

- Supine
- Prone
- Side-lying

Treatment Positions

The physical therapist aide frequently helps the patient prepare for treatment. That preparation often includes assisting the patient into a position that will be comfortable for a lengthy treatment time.

Sometimes treatments are accomplished with the patient sitting in a chair or lying on a treatment table or mat. The most common lying positions are **supine**, or lying on the back; **prone**, or lying face down; and **side-lying**, or lying on one's side. The therapist or assistant will recommend the position for treatment. Because patient comfort is essential to successful treatment, it is important to talk to the patient and help find the best position.

Empathy and communication are great positioning aids! One of the best clues to positioning is the aide's own understanding and ability to imagine how it would feel to be in the same situation as the patient. Sometimes moving a patient just a few inches or straightening a wrinkled sheet will make a big difference in patient comfort.

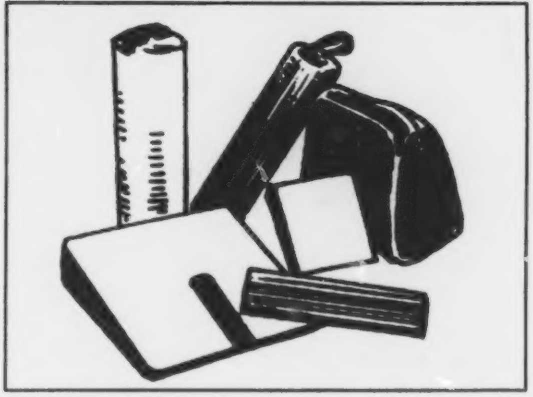
Two-way communication is also important in positioning. Listen actively to patients regarding their comfort. The aide should demonstrate sensitivity to the nonverbal communication of the patient regarding comfort and positioning. A patient's grimace or an appearance of tension provides clues that all is not well. Patients will be grateful that you are "tuned in" to their needs.

Positioning Aids and Equipment

Many types of positioning aids and equipment are used in physical therapy. They may be as simple as using a few pillows to position a part of the body or as complicated as using bolsters, slings, and pillows to position a body part. Pillows, rolled towels or blankets, foam-filled bolsters and rolls, Velcro™ straps, and sandbags are often used to position patients on treatment tables or mats in the physical therapy department. Common foam-filled bolsters and rolls are illustrated in Figure 1.1.

Some treatment tables have movable parts that allow the head to be raised or the

Figure 1.1 - Bolsters and Rolls



knees to be bent similar to the way a hospital bed works.

Elevating leg rests and adjusting footplate height provide two common wheelchair positioning aids. The wheelchair seat belt helps maintain the patient in an upright sitting position. Reclining wheelchair backs provide an alternative position for some patients. Some patients have wheelchairs that are specially molded to their bodies to hold them in the best position.

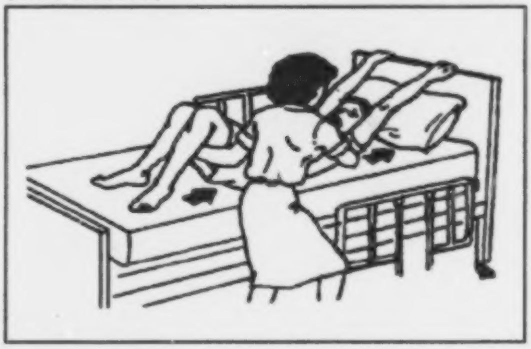
Moving Patient to the Head or to One Side of Mat or Treatment Table

Regardless of the eventual position the patient will assume, it is sometimes necessary to help the patient reposition on the mat or treatment table. For example, the patient may end up too far to one side or too far down on the mat after a transfer.

Move/Assist Patient to the Head of the Mat or Treatment Table

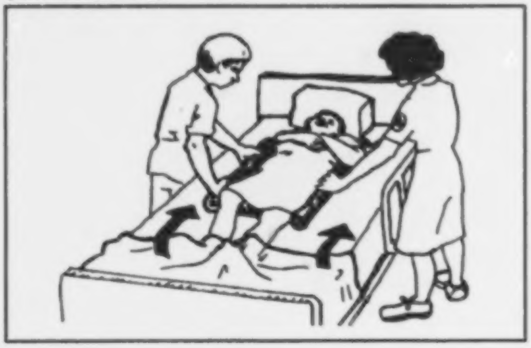
Often a patient will slip too far down on the exercise mat, treatment table, or hospital bed, etc. and will need help to move up. If the patient is dependent, there are two methods frequently used to move the patient up. If the patient is small or needs little assistance, the aide may be able to put his or her arms under the shoulders and knees of the patient and slide the patient, being sure to use good body mechanics (Figure 1.2). If the patient is large or totally dependent, two caregivers should use a transfer sheet to move the patient (Figure 1.3).

Figure 1.2 - Assist Patient to Head of Bed (One Person)



When moving the patient, you must be careful not to pull the patient in such a way that the skin receives friction burns from the sheets. This is particularly a problem if the sheets are damp and skin sticks to them. Bare skin against a plastic mat or treatment table presents the same kind of problem; you must be sure the patient can slide freely before you try to move the patient over the surface. Placing clothing or a sheet under the patient will aid in moving the patient.

Figure 1.3 - Move Patient to Head of Bed (Two Person)



Steps of Procedure for Moving/ Assisting Patient to Head of Mat (One Person):

1. Wash your hands.
2. Identify and greet patient. Identify self.
3. Explain what you are going to do.
4. Provide privacy.
5. If the patient has any tubing coming from his or her body, make sure it will move freely with the patient.
6. Move pillow to wall so patient does not hit his or her head when moving up.
7. Help patient bend his or her knees and press feet firmly against the mat.
8. If patient is able, have him or her grasp head of mat, otherwise cross his or her arms over chest.
9. Kneel on mat and slide one arm under the patient's shoulders and the other under the thighs.
10. On the count of three, have the patient push with his or her feet as you shift your weight and slide the patient up on the mat.
11. Replace pillow.
12. Make the patient comfortable; reposition tubing if needed; adjust sheets.
13. Wash your hands.

Steps of Procedure for Moving Patient to Head of Mat (Two Person):

1. Ask another aide to work with you.
2. Wash hands.
3. Identify and greet patient. Identify self and other aide.
4. Explain what you are going to do.
5. Provide privacy.
6. If the patient has any tubing coming from his or her body, be sure it will move freely with the patient.
7. Move pillow to wall so patient does not hit his or her head when moving up.
8. Caregivers should kneel on opposite sides of the patient.
9. Position a draw sheet or folded regular sheet under shoulders and hip area. Each aide should roll edges of sheet toward patient's body and grasp rolled sheet with his or her hands at the patient's shoulders and at the mid-hip area.
10. On the count of three, each aide lifts the patient up off the surface of the mat and toward the head of the mat.
11. Replace pillow.
12. Make the patient comfortable; reposition tubing; adjust sheets.
13. Wash your hands.

Steps of Procedure for Moving Patient to One Side of the Mat:

1. Wash your hands.
2. Identify and greet patient. Identify self.
3. Explain what you are going to do.

4. Provide privacy.
5. If the patient has any tubing coming from his or her body, be sure it can move freely with the patient.
6. Stand or kneel on the side of the mat toward which you intend to move the patient.
7. Slide both arms under the patient's back to his or her far shoulder, then slide the patient's shoulders toward you on your arms. Keep your back straight as you slide the patient.
8. Slide both your arms as far as you can under the patient's buttocks and slide his or her buttocks toward you. Use a draw sheet whenever possible.
9. Place both your arms under the patient's feet and slide them toward you on your arms.
10. Make the patient comfortable; reposition tubing if needed; adjust sheet.
11. Wash your hands.

Supine Position

The physical therapist aide will assist many patients to the supine position for treatment.

Steps of Procedure for Placing Patient in Supine Position for Treatment:

1. Wash hands.
2. Identify and greet patient. Identify self.
3. Explain what you are going to do.
4. Provide privacy.
5. Assist patient to lie on back.
6. Place pillow under head.
7. Place pillow under knees.
8. Cover patient with sheet.
9. Ask patient if he or she is comfortable.
10. Notify therapist or assistant that patient is ready for treatment.
11. Wash hands.

Many persons have no difficulty lying flat on their backs; however, there are some situations that make the supine position difficult or uncomfortable for patients.

A patient with heart or lung diseases will often experience shortness of breath if he or she must lie flat. This patient will need to be propped up on pillows. An elderly patient with a stooped posture is usually unable to lie flat and must have two or three pillows under his or her head. This type of patient may also tolerate side-lying better than the supine position. It is a good idea to ask the patient if lying on his or her back is a problem.

Side-Lying Position

To help a patient who can move independently turn to one side on a mat or bed, the aide must first help the patient move to one side of the mat. This allows the patient room to roll onto his or her side without getting too close to the edge of the mat.

If the patient is unable to help, a draw sheet placed under the patient's body can be an asset. This technique can be used in the patient's bed or on a mat or treatment table.

In the side-lying position, the patient may need assistance in positioning the lower arm and shoulder for comfort; the shoulder and arm should remain in front of the body. The lower leg may be straight or flexed. The upper leg should be flexed if the lower leg is straight and vice versa. Pillows should be placed under the patient's head and between the legs. The pillow between the legs helps maintain comfortable body alignment and prevents the chaffing that occurs when bare legs are together for a long period of time.

Steps of Procedure for Placing Patient in Side-Lying Position for Treatment:

1. Wash your hands.

2. Identify and greet patient. Identify self.

3. Explain what you are going to do.

4. Provide privacy.

5. If the patient has any tubing coming from his or her body, make sure it will move freely with the patient.

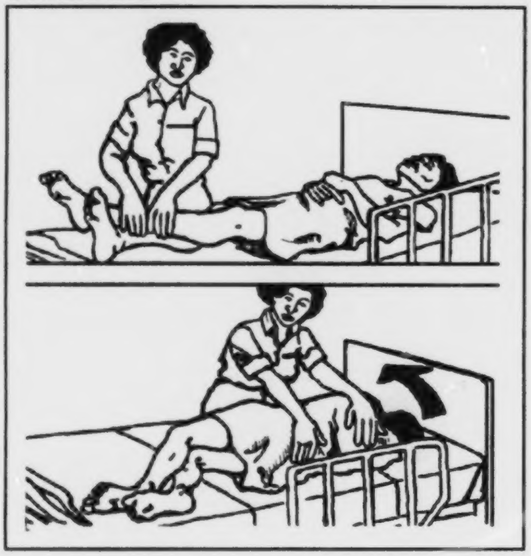
6. Check to see that the patient has ample space to turn without getting too close to the edge of the mat.

7. Cross the patient's arms over his or her chest.

8. Turning patient toward you (Figure 1.4)

   a. Cross the leg farthest from you over the leg closest to you.

Figure 1.4 - Turning the Patient to Side Toward You



   b. Reach across the patient and put one hand behind his or her far shoulder.

   c. Place your other hand behind his or her far hip, gently roll him or her toward you.

   Turning patient away from you

   a. Cross the leg closest to you over the leg farthest from you.

   b. Place one hand on the patient's shoulder near you.

   c. Put your other hand under patient's buttocks, turn him or her gently on his or her side, facing away from you.

9. Support the patient's head with the palm of one hand and slide a pillow under his or her head and neck with your other hand.

10. Position patient's knees slightly flexed, upper leg more than the lower leg. Support upper leg on pillow.

11. Make the patient comfortable; reposition tubing if needed; adjust sheet.

12. Wash your hands.

Prone Position

To help a patient into the prone position from the supine position, begin by placing the patient in the side-lying position, but do not pull the lower arm and shoulder forward. The lower arm should stay down at the patient's side. As the patient turns, he or she must roll over the arm. A few patients are able to roll over with their arm extended over their heads, but this causes shoulder discomfort for many people. The patient's top leg should be in front of, or crossed over, the lower leg.

Once the patient is prone, the patient's arms should be bent at the elbows and brought up to rest next to the head. Be sure the patient's toes are not in a cramped position. The patient's feet may need to hang off the edge of the surface, or a pillow may be placed under the ankles for comfort as shown in Figure 1.5.

The patient's head must be turned to one side to allow free breathing. Be sure the prone position does not cause neck or back pain. If it does, you should return the patient to the side-lying or supine position and report the problem to the patient's therapist. Some patients prefer pillows at the head and chest.

The patient's body should be aligned in a straight position. Some patients are more comfortable with a pillow under their abdomen while lying prone. To turn the patient back to the supine position, reverse the process; be sure the patient has room to roll over safely.

Steps of Procedure for Placing Patient in Prone Position for Treatment:

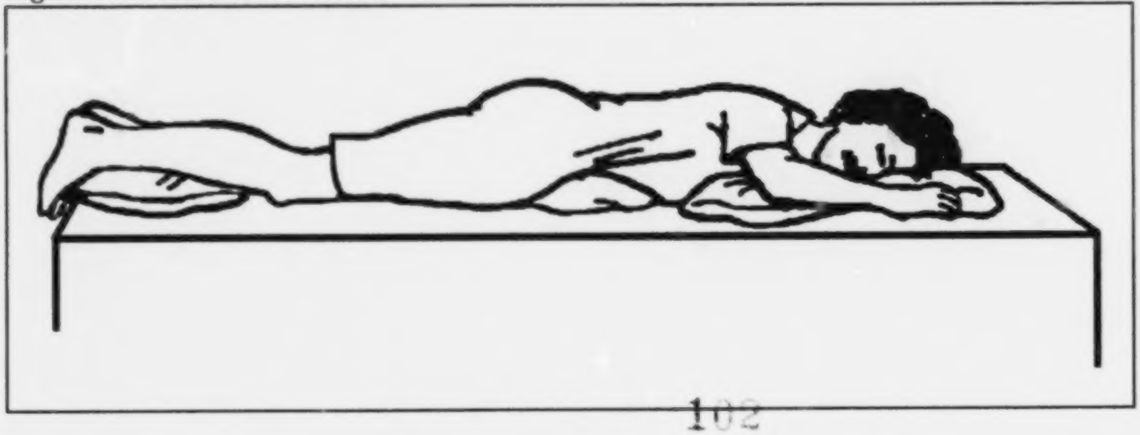
1. Wash your hands.

2. Identify and greet patient. Identify self.

3. Explain what you are going to do.

4. Provide privacy.

Figure 1.5 - The Prone Position



5. If the patient has any tubing coming from his or her body, make sure it will move freely with the patient.
6. Help patient to move to side of mat.
7. Assist patient to turn to side-lying position.
8. Again, move patient to side of mat.
9. Patient's lower arm may remain at side or be positioned away from the body.
10. Cross upper leg over lower leg.
11. Roll patient onto abdomen.
12. Turn head to one side. A small, firm pillow/folded blanket can be placed under the head for comfort.
13. Assist patient to bend arms at elbows and raise them next to the head. A small pillow may be placed under the shoulder on the same side as the face.
14. For female patients, a small, firm pillow may be placed under abdomen to prevent pressure on breasts and rolls may be placed at sides of chest for privacy.
15. Extend feet over end of mat or slightly elevate feet off mat by flexing knees and placing pillow under lower legs.
16. Make the patient comfortable; reposition tubing if necessary; adjust sheet.
17. Wash your hands.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

Lesson 1: Positioning

Activity Sheet

1. Who should the aide consult for positioning a patient for treatment?

____

2. Where should pillows be placed when a patient is side-lying?

____

3. Where may pillows be placed when a patient is prone?

____

4. Where should the lower arm and shoulder be when a patient is side-lying?

____

5. List five positioning aids that add to patient comfort and help maintain position.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

6. Describe two ways to move a dependent patient to the head of a hospital bed, treatment table, or exercise mat.

   a. ______________________________

   ____

   b. ______________________________

   ____

7. **What are the three common lying positions for treatment?**

a. ______________________________

b. ______________________________

c. ______________________________

Lesson 1: Positioning

Clinical/Laboratory Activity Sheet

Name ____ Date ____________________

1. At your clinical site, observe and record the position of patients who receive part of their treatment while lying down. Out of 10 patients, how many were treated supine? ______

   Side-lying?_____ Prone?_____ In two or three positions?____________________

2. In addition to the activity above, what sort of treatment was administered when a patient was supine?____

   Prone?____

   Side-lying?____

   Write a summary of your findings and submit it to your classroom instructor. Use the back side of this sheet if more space is needed.______________________________

   ____

   ____

   ____

   ____

3. Do the following activities with a physical therapy student if the class is large enough. If not, ask any health occupations student to help. Rotate role-playing the patient and the health care worker.

   a. Practice positioning your "patient" in (1) supine, (2) prone, and (3) side-lying positions. Use pillows to improve his or her comfort.

   b. Have your "patient" simulate difficulty moving one side of the body and repeat positioning from supine to side-lying to prone. Use equipment to maintain position.

   c. Practice using a draw sheet to assist your "patient" in turning to the side-lying position.

   d. With a partner, practice putting a draw sheet under a third person and then slide the "patient" up or down on the mat.

Lesson 2:
Draping

Objectives:

A. Describe the importance of draping.

B. Identify things to remember when draping.

C. Drape upper extremity while patient is in sitting position.

D. Drape upper extremity while patient is in supine position.

E. Drape patient for lower extremity treatment.

F. Drape patient for back treatment.

Key Term:

- Drape

Why Drape?

A **drape** is the covering placed over the patient exposing the part to be treated. The drape should also maintain privacy and warmth. Patients often need to remove part or all of their clothing before treatment. For example, a patient would need to remove his or her shirt or blouse before hot packs could be administered to the back. If draping were not provided, the patient might get too cool or be too embarrassed to be comfortable while being treated. The way the drape is arranged also keeps lotion, gel, or powder off any clothing remaining on the patient.

Draping:
- Uncovers the area to be treated
- Maintains the patient's privacy
- Keeps the patient warm
- Helps keep clothing clean

Several types of linens can be used to drape the patient: sheets, terry cloth towels, or lightweight blankets. Hospital gowns, disposable garments, or disposable sheets may also be used to drape.

Things to Remember When Draping

Hospital patients usually wear a hospital gown or pajamas when they come to physical therapy. Outpatients, however, will be wearing street clothes. Usually street clothes should be removed to keep them clean and free of wrinkles, and to allow the patient freedom of movement. Underwear can usually be left on the patient; this helps maintain modesty. Ideally, patients should wear gym-type clothing to the clinic. If a patient is waiting for treatment, instruct him or her to put on attire appropriate for the activity. Give the patient a sheet or lightweight blanket to cover with, then he or she can sit or lie down to wait for treatment.

The draping should not be tight, but the patient should not have to hold the drape in place. Tie a hospital gown at the neck or back. Tuck edges of a sheet or towel under the patient or under the clothing to hold it in place. Occasionally a drape may be carefully safety pinned or held down with a sandbag. After draping, cover the part to be treated with a towel for warmth and privacy until the therapist or assistant arrives.

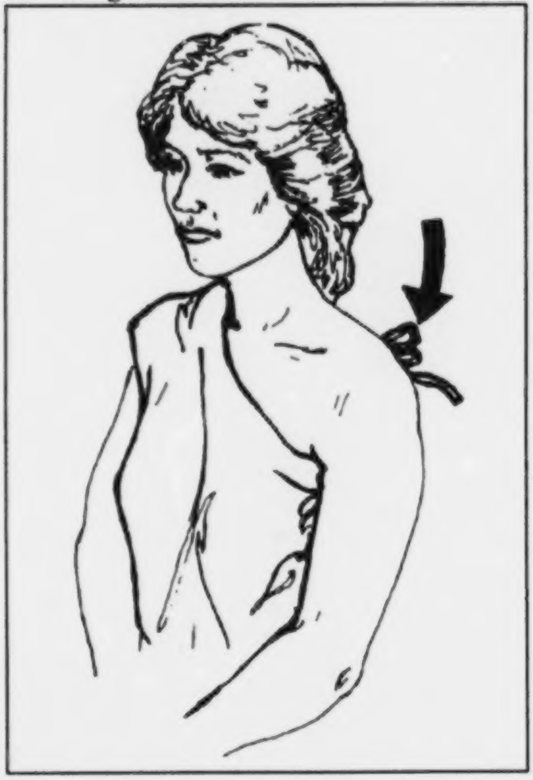
The amount of draping sometimes depends on the room temperature. The physical therapist aide may be warm from moving around, but the patient may be cool because of inactivity.

If the draping material gets wet, it will feel cold to the patient. Ask the patient if the draping needs to be replaced. Be sure to maintain patient modesty when replacing the draping.

Steps of Procedure for Draping for Upper Extremity for Treatment (Sitting Position):

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.

Figure 2.1 - Upper Extremity Drape While in Sitting Position



6. If the patient is in street clothes or pajamas, have him or her remove upper body clothing.
7. Have patient either: (Figure 2.1)
    a. Put on a hospital gown leaving affected arm outside, tying it in back, or
    b. Drape a sheet around unaffected shoulder leaving affected arm exposed.
8. Have the patient sit in a chair facing the treatment table.
9. Secure gown or sheet so the drape does not slip.
10. Cover exposed shoulder and arm with a towel.
11. Notify the therapist or assistant that the patient is ready for treatment.
12. Wash hands.

Steps of Procedure for Draping Upper Extremity for Treatment (Supine Position):

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. If the patient is in street clothes or pajamas, have him or her remove upper body clothing.

7. Assist patient in putting on hospital gown leaving affected arm outside, tying it in back.
8. Assist the patient to lie supine; keep the back of the gown out from under the patient.
9. Put pillows under the patient's head and knees.
10. Cover the patient with a sheet and position affected extremity comfortably on top of the sheet.
11. Pull the sheet into the axilla (armpit) snugly.
12. Cover exposed shoulder and arm with a towel.
13. Notify the therapist assistant that the patient is ready for treatment (Figure 2.2).
14. Wash hands.

Steps of Procedure for Draping Lower Extremity for Treatment:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist the patient in removal of clothing to expose the leg to be treated.
7. If the patient wishes to remove upper body clothing, assist patient in putting on a hospital gown.
8. Help the patient lie supine on the treatment table.
9. Place a pillow under the patient's head.
10. Cover the patient with a sheet.
11. Fold the sheet to the midline, uncovering the leg to be treated.
12. Lift this leg slightly and pull the sheet well up under the leg.

Figure 2.2 - Upper Extremity Drape While in Supine Position

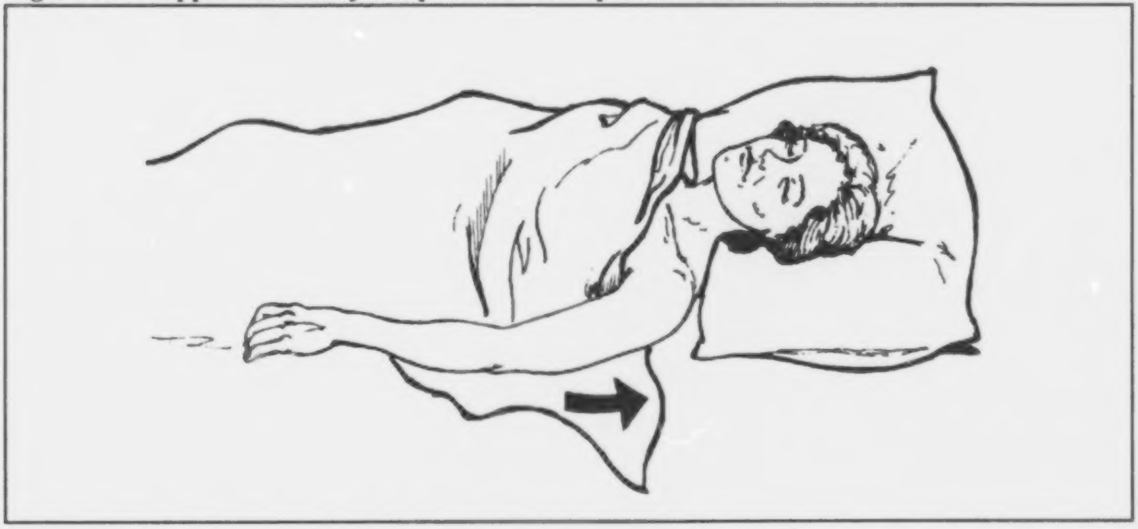
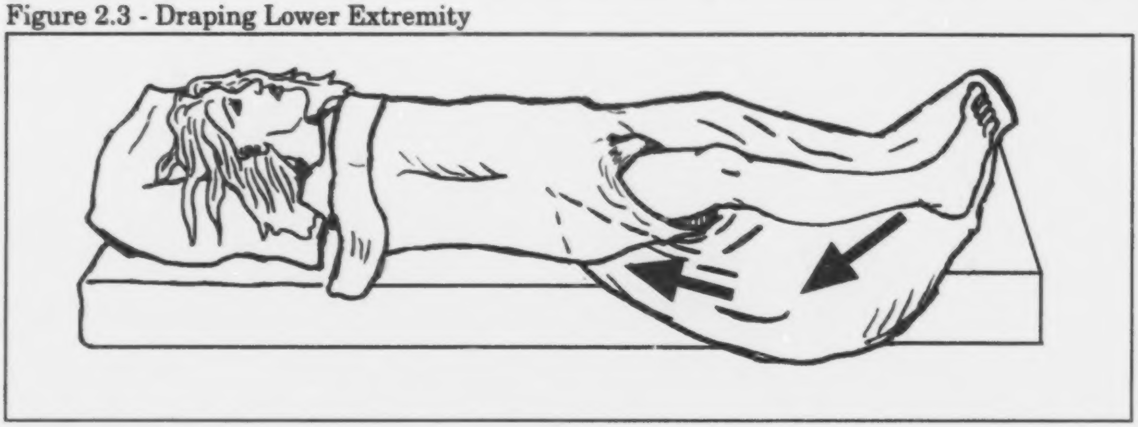


Figure 2.3 - Draping Lower Extremity



13. Tuck the end of the sheet in under the patient's waist or hip (Figure 2.3).

14. Cover the patient's leg with a towel.

15. Notify the therapist or assistant that the patient is ready for treatment.

Steps of Procedure for Draping for Back Treatment:

1. Wash hands.

2. Assemble equipment.

3. Identify and greet patient. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

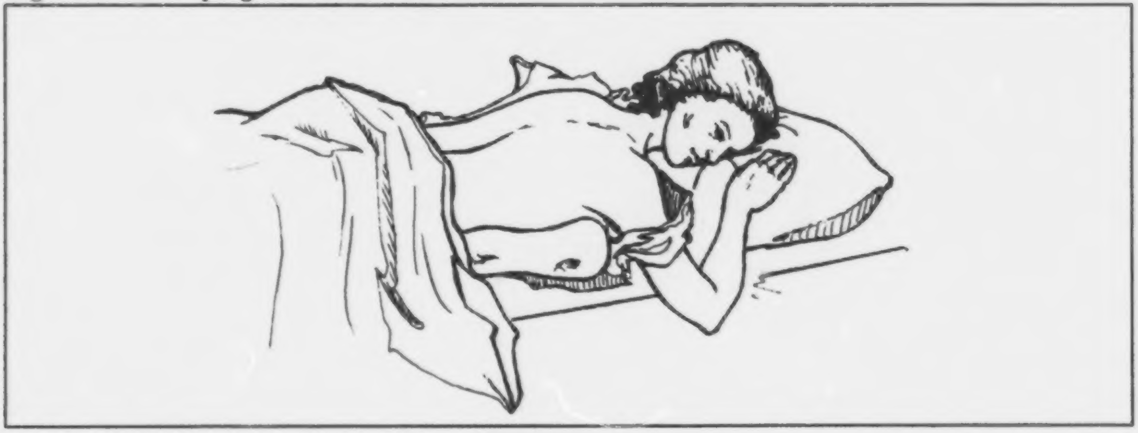
6. Instruct or assist the patient in putting on a hospital gown with the ties in the back. Some patients may prefer not to put on a hospital gown.

7. Help the patient lie prone on the treatment table.

8. Place pillow under the patient's abdomen and ankles for comfort.

9. Cover the patient with a sheet.

Figure 2.4 - Draping for Back Treatment



10. Expose the patient's back by lowering the sheet to hip level. Open the hospital gown to expose the back.

11. A female patient may appreciate rolled towels placed at the sides of her chest for modesty (Figure 2.4). Place a towel across the patient's upper back.

12. Notify the therapist or assistant that the patient is ready for treatment.

13. Wash hands.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

Lesson 2: Draping

Activity Sheet

1. List two reasons for draping a patient.

   a.______________________________

   b.______________________________

2. Name at least three materials used to drape a patient.

   a.______________________________

   b.______________________________

   c.______________________________

3. Why should an outpatient remove street clothes before treatment?

   ____

   ____

   ____

4. How should you secure the drape for a patient receiving treatment for the right leg in the supine position?

   ____

   ____

   ____

5. How should you secure the drape for a patient receiving treatment for the shoulder while in the supine position?

   ____

   ____

6. When patients receive back treatments, in what position do they usually lie on the treatment table?

   ____

Lesson 2: Draping

Clinical/Laboratory Activity Sheet

1. After your clinical supervisor demonstrates the draping techniques, practice the following procedures with a classmate acting as the "patient." Reverse roles so that you can better relate to a patient's need for privacy.

    a. Drape a sitting patient for a shoulder treatment.

    b. Drape a patient lying supine for a shoulder treatment.

    c. Drape a patient lying prone for a back treatment.

    d. Drape a patient lying supine for treatment of the left hip.

2. With your clinical supervisor's approval, assist in draping patients. Then drape patients on your own.

Lesson 3:
Assisting with Treatment

Objectives:

A. Identify equipment.

B. Identify thermal modalities.

C. Assist with thermal therapy treatments.

   1. Hot pack treatments
   2. Ultrasound treatments
   3. Paraffin Bath
   4. Diathermy
   5. Fluidotherapy™
   6. Ice pack treatments
   7. Ice massage

D. Assist with hydrotherapy.

E. Assist with electrotherapy.

F. Set up and take down equipment used in exercise.

G. Assist with mechanical traction.

   1. Cervical
   2. Lumbar

Key Terms:

- Modalities
- Hot pack
- Ultrasound
- Paraffin bath
- Diathermy
- Fluidotherapy™
- Ice pack
- Ice massage
- Hydrotherapy
- Electrotherapy
- Mechanical traction

If the physical therapist aide is asked to help the patient get ready for treatment, find out where the patient is to be treated and what the patient needs to be wearing. Patients receiving treatment frequently need to undress and put on a hospital gown or cover with a sheet.

Take the patient to a booth or dressing room to change or remove clothing. Provide the appropriate garment or linens. If the patient has difficulty moving, ask if any assistance is needed. A chair to sit on should always be placed in the booth where a patient is changing clothes.

If the patient is to receive treatment in a chair or on a treatment table, accompany the patient to where he or she needs to be.

Thermal Modalities

Modalities are any physical agent applied to produce therapeutic changes to biologic tissue; includes but not limited to thermal, acoustic, light, mechanical, or electrical energy. Thermal modalities either heat or cool the patient's body. While thermal modalities can be very complicated, some are as simple as a warm bath. Heating modalities include hot packs, paraffin bath, diathermy, ultrasound, and Fluidotherapy™. Cooling modalities include ice packs, ice bags, and ice massages. The physical therapist aide usually sets up the equipment, prepares the patient by positioning and draping, and removes the equipment after treatment. With additional training and experience, the physical therapist aide may be responsible for conducting some or a portion of the treatment under the therapist's or assistant's direction.

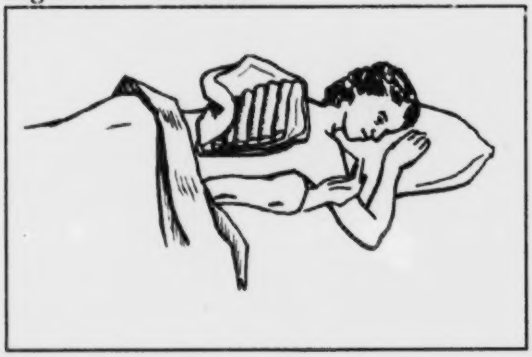
Thermal Therapy

With any type of thermal modality where the patient will be left alone for a few minutes, the patient must have a call bell (or foot-activated tap bell if both hands are being treated) for safety. A timer is set to tell the staff when the treatment is complete. The call or tap bell is *always* placed where the patient can reach it. If the hot pack gets too hot, the patient is instructed to ring the bell. If the hot pack is not removed promptly, the patient could be burned. If the physical therapist aide answers the bell, he or she should remove the hot pack and call the patient's therapist. If instructed to do so by the patient's therapist, the physical therapist aide may add more towel layers and confirm patient comfort. Since a cooling treatment could freeze tissue, the call or tap bell is placed close by so the patient can press it if needed.

Hot Packs

A **hot pack** is a quilted canvas sack filled with a sandy, gel-like mixture that holds heat for a long time (Figure 3.1). In physical therapy, hot packs are used to warm superficial tissues. The hot packs are heated in a water-filled hot pack machine. The temperature of the hot pack machine is maintained at 120°F. The hot pack machine should be checked weekly to be sure the water level is high enough to cover the packs. If the water level is low, add either distilled or tap water.

Figure 3.1 - Hot Pack



Steps of Procedure for Assisting with Hot Pack Treatments:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Position and drape the patient comfortably as directed.
8. Wrap the hot pack in towels or specially shaped foam-filled hot pack covers.
9. Bring the hot pack to the patient's side.
10. Place call bell or tap bell where patient can reach it.
11. Notify therapist or assistant that the patient is ready for treatment.
12. After treatment, remove the hot pack from the patient.
13. Dry the patient's skin with a towel.
14. Cover the area to keep the patient warm.
15. Return the hot pack to the heating machine.

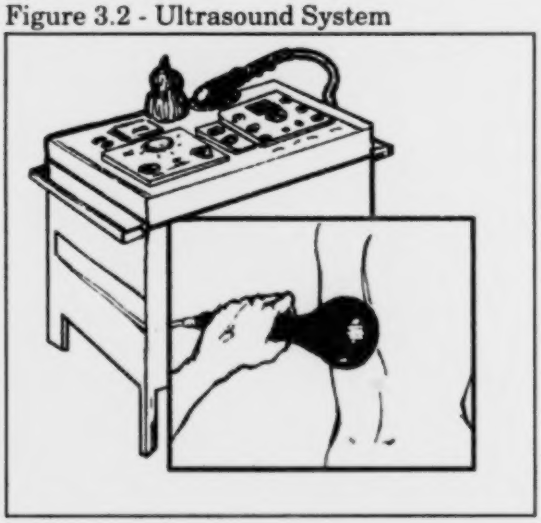
16. Hang the hot pack covers to dry or place towels in the laundry container.
17. Notify the therapist or assistant that the patient is ready for the rest of the treatment.
18. Wash hands.

Ultrasound

Ultrasound is very high frequency sound waves that are beyond the range of human ears. In physical therapy, these waves are used to produce heat for treatment. This form of heat penetrates deeper than a hot pack. An interesting thing about ultrasound is that the patient normally feels little, if any, heat; however, ultrasound is a powerful source of energy and a burn can occur deep in the body tissue. It is very important that ultrasound not be misused.

The ultrasound waves are produced in a metal device called a sound head that is placed against the body (Figure 3.2). A liquid or gel is required to keep the sound head in close contact with the body so that the sound waves can penetrate and produce the deep heat.

Figure 3.2 - Ultrasound System



A physical therapist aide should never perform an ultrasound treatment unless the physical therapist gives additional training and instruction. When the physical therapist approves performing a portion of the overall ultrasound treatment, the aide should do only the requested task for that specific patient.

Steps of Procedure for Assisting with Ultrasound Treatments:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Position and drape patient comfortably as directed.
8. Position the ultrasound machine where the patient is to be treated.
9. Plug the machine into the electrical wall socket.
10. Place warmed gel or lotion on or near the ultrasound machine.
11. Have extra terry cloth towels for removing excess lotion or gel.
12. Notify therapist or assistant that patient is ready for treatment.
13. After treatment, return the ultrasound machine to its storage place in the clinic.

14. Return lotion or gel to a warmer or leave it with the machine.

15. Place soiled linens in the hamper.

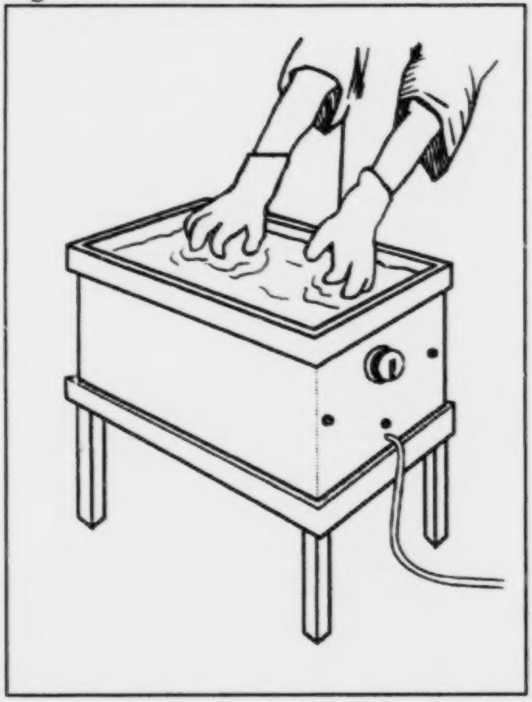
16. Notify therapist or assistant that patient is ready for rest of treatment.

17. Wash hands.

Paraffin Bath

The **paraffin bath** is commonly used for a patient who has arthritic hands. Paraffin is melted with oil in a small tub. (Figure 3.3). A thermometer is kept in the paraffin at all times. It should *never* register higher than 130°F! The thermometer should read 127°F to 128°F. If the temperature is over 130°F, alert the physical therapist or assistant.

Figure 3.3 - Paraffin Bath



Steps of Procedure for Assisting with Paraffin Bath:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Check the temperature of the paraffin.
8. Assist patient in rolling up long sleeves.
9. Direct the patient to wash and dry his or her hands.
10. Have patient sit while waiting for therapist.
11. Notify therapist or assistant that patient is ready for treatment.
12. When the time is up, have the patient move the fingers inside the paraffin to loosen it.
13. Grasp the outer towel; pull paraffin and towels off together.
14. Help the patient dry moisture off the hands with a clean towel.
15. Separate the towels and paraffin.
16. Place used paraffin in the recycling container.
17. Discard paper towels.
18. Put cloth towels in a laundry hamper.
19. Notify therapist or assistant that patient is ready for the rest of the treatment.
20. Wash hands.

Diathermy

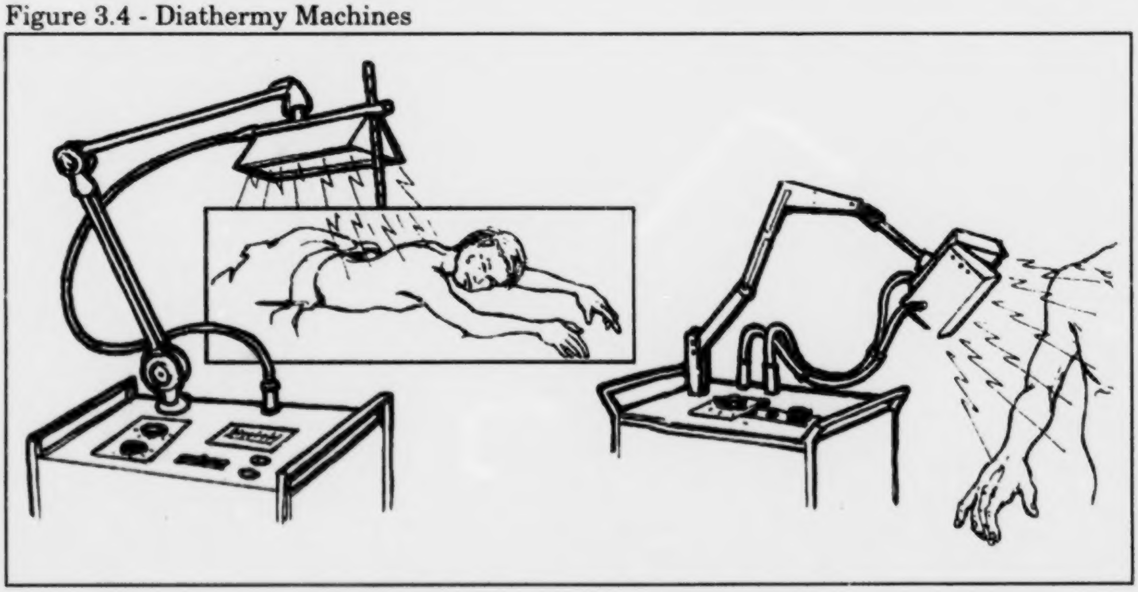
Diathermy is a form of deep heat that uses electromagnetic energy in a way similar to the microwave in your kitchen (Figure 3.4).

Because of the danger of burns to the patient, only the therapist or assistant administers diathermy treatments.

Steps of Procedure for Assisting with Diathermy:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Position and drape the patient comfortably as indicated. (Certain diathermy machines cannot be used near metal tables or chairs.)
8. Place the diathermy machine near the patient and plug it into the wall electrical socket.
9. Place call bell or tap bell where patient can reach it.
10. Notify the therapist or assistant that the patient is set up for treatment.
11. After the treatment is complete, turn the machine off.
12. Remove the machine from the patient, unplug it, and store it.
13. Cover the treated area with a towel to keep it warm until the therapist or assistant returns to complete the patient's treatment.
14. Notify the therapist or assistant that the patient is ready for the rest of the treatment.
15. Wash hands.

Figure 3.4 - Diathermy Machines



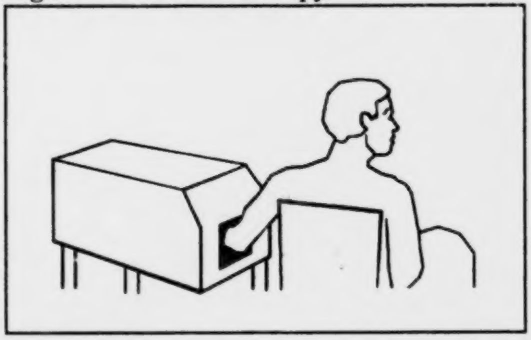
Fluidotherapy™

Fluidotherapy™ is a device with a chamber filled with warm air and circulating ground corncobs (Figure 3.5). In physical therapy, the patient places his or her arm or leg inside the chamber to receive a gentle massage and heat treatment.

Steps of Procedure for Assisting with Fluidotherapy™:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Remove patient's clothing to above the elbow for arm treatment or the knee for leg treatment.
7. Seat the patient comfortably beside the machine so that the affected arm or leg can be placed through the "port" or opening. A soft rubber seal keeps the corncobs inside the chamber.
8. Place call bell or tap bell where patient can reach it.
9. Notify the therapist or assistant that the patient is ready for treatment.
10. After the treatment (the machine turns off automatically), have the patient shake off the ground corncobs from the arm or leg while it is still in the machine.
11. Pull the arm or leg out of the machine port. Replace the patient's clothing.
12. Notify therapist or assistant that the patient is ready for the rest of the treatment.
13. Wash hands.

Figure 3.5 - Fluidotherapy™



Ice Packs

Ice packs or ice bags are used to cool areas that are inflamed, painful, and swollen. An example of an injury for which an ice pack would be used is a sprained ankle. Ice for treatment can come from several sources, including crushed ice from the freezer placed in a plastic bag (Figure 3.6). The most common and easiest to apply is in pack form, similar to a hot pack. Ice packs of various sizes and shapes are composed of a gel-like material in a plastic cover. Ice packs are kept in a special machine (Figure 3.7) that looks similar to a hot pack machine or in the freezer compartment of a refrigerator.

Figure 3.6 - Ice Bag

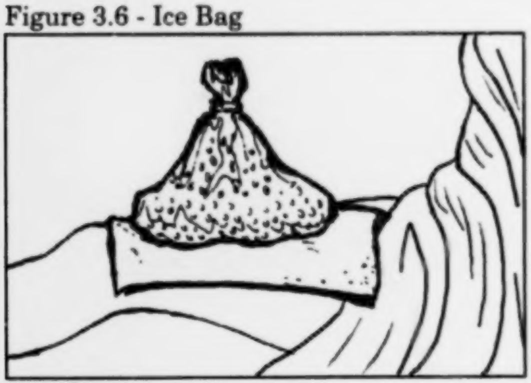
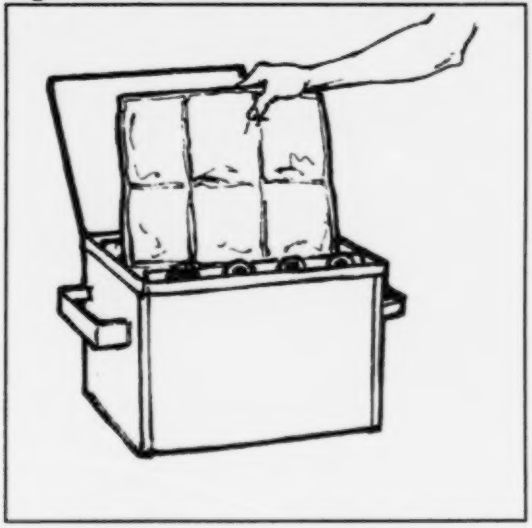


Figure 3.7 - Commercial Ice Pack



Steps of Procedure for Assisting with Ice Pack Treatments:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Position and drape the patient comfortably as indicated.
8. Wrap the ice pack in a pillowcase or terry cloth towel according to the therapist's or assistant's instructions.
9. Place a call bell or tap bell where the patient can reach it.
10. Notify therapist or assistant that patient is ready for treatment.
11. After the treatment, return the ice pack to the freezer unit.
12. Put used linens in the laundry hamper.
13. Notify the therapist or assistant that the patient is ready for the rest of the treatment.
14. Wash hands.

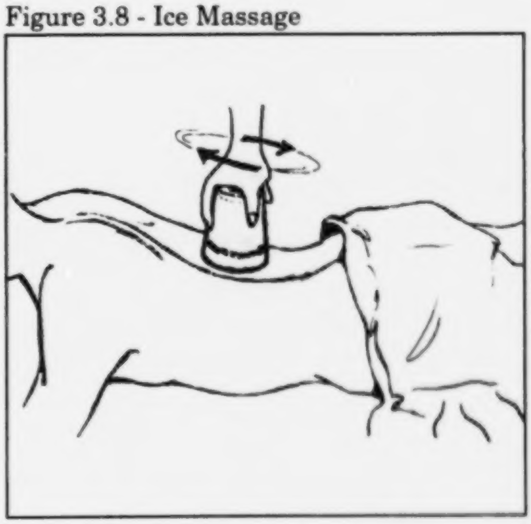
Ice Massage

Ice massage is a massage using ice frozen in small paper cups (Figure 3.8).

Steps of Procedure for Assisting with Ice Massage:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.

Figure 3.8 - Ice Massage



5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Position and drape patient comfortably as indicated.
8. Place several extra towels nearby the treatment area to catch the water as the ice melts.
9. Take the ice, which has been frozen in a small paper cup, from the freezer or ice pack machine.
10. Peel part of the cup away, exposing the ice.
11. Notify the therapist or assistant that the patient is ready for the ice massage.
12. After treatment, discard the remaining paper cup and ice in an appropriate container.
13. Put used linens in the laundry hamper.
14. Notify therapist or assistant that patient is ready for the rest of the treatment.
15. Wash hands.

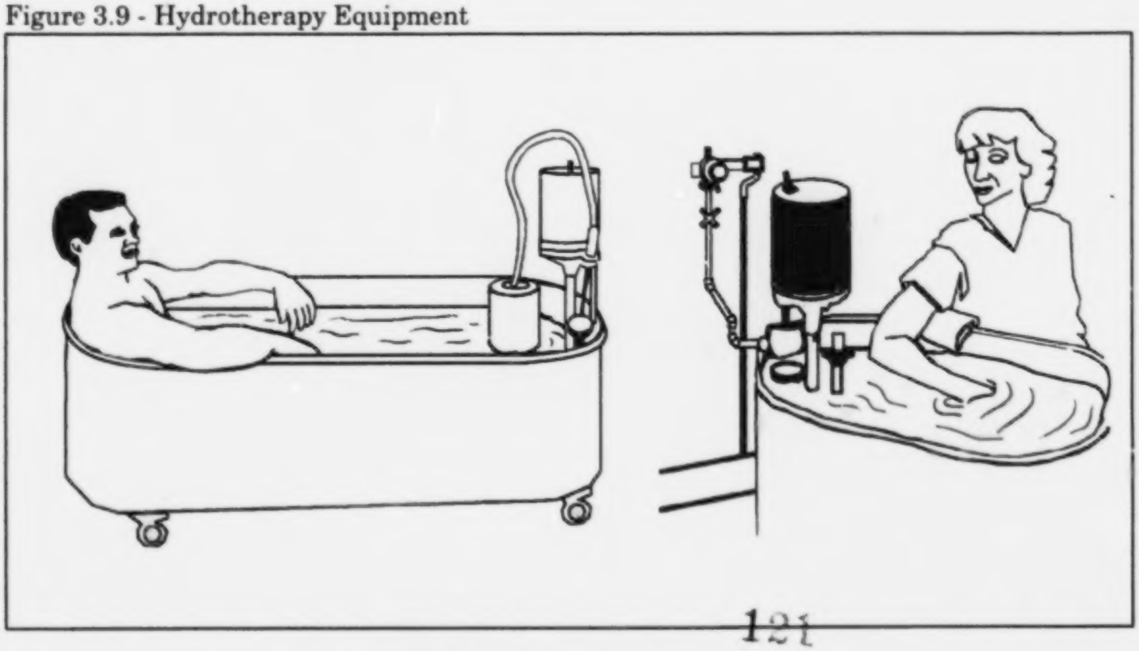
Hydrotherapy

Hydrotherapy involves the use of water in treatment. Hydrotherapy includes the use of various sizes of whirlpools for the arm, leg, or full body (Figure 3.9).

Sometimes a tall chair is used to seat the patient high enough to put a leg into the whirlpool. A hoist or electrically powered lift may be used to move a patient on a stretcher into a large whirlpool.

The whirlpool tank must be filled with water of the correct temperature, usually between 96°F and 105°F. Sometimes an additive is put into the tank as it fills. The

Figure 3.9 - Hydrotherapy Equipment



additive may (1) help kill bacteria in the water, (2) reduce the water's tendency to foam when it is agitated, or (3) increase patient comfort by decreasing the stinging sensation if the patient has an open wound.

The patient will wear clothing appropriate for the treatment. As much modesty as possible should be maintained. If the upper body is not in the water, it is important to keep the patient warm enough to be comfortable and not be chilled.

The patient must be assisted into the water and positioned comfortably. If there are dressings on a wound, the physical therapist aide may be directed to remove them either before or after the patient enters the water. Use proper Body Substance Precautions (e.g., gloves, gown, mask). Make note of any discharge on the dressing and report it to the therapist. Discard the dressings and personal protective equipment appropriately.

Transferring the patient into and out of the whirlpool calls for extreme care, because many surfaces--and the patient--will be slippery. It may be advisable to use a gait belt even if the whirlpool does not seem to be a place where one would be necessary or appropriate.

Caution: In a hydrotherapy treatment, the patient must not be left unattended. Occasionally patients become faint because of illness, pain, or the heat of the water. If a patient loses consciousness in a large whirlpool, drowning is a real possibility. An infant or small child in a small whirlpool is always at risk.

Another risk with hydrotherapy equipment is electrical shock. *All equipment must be grounded.* Electrical cords must be in good repair and plugged into the wall outlet securely. These are the responsibilities of the director of physical therapy and the facility maintenance department. However, if the aide sees a problem or detects the slightest shock, it should be reported immediately.

Steps of Procedure for Assisting with Hydrotherapy:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. If more than one whirlpool is available, select one of appropriate size.
8. Close the drain.
9. Fill the whirlpool to 2/3 full, covering the agitator intakes and adjusting the temperature at the valves (between 96°F and 105°F).
10. Switch on the turbine and adjust water pressure.
11. Pour in additives as directed by the patient's therapist or assistant.
12. Make sure a stool or whirlpool chair is in place and wheel castors are locked.
13. Put linens, the timer, and a call bell nearby.
14. Turn off the turbine.

15. Notify the therapist or assistant that the hydrotherapy unit is ready.

16. Assist the therapist or assistant in placing the patient in whirlpool.

17. If indicated by therapist, stay close to whirlpool during treatment.

18. When the treatment is finished, help the therapist remove the patient from the water.

19. Dry the treated area with a clean towel. If there is an open wound, assist the therapist or assistant in dressing the wound.

20. Put used linens in laundry hamper.

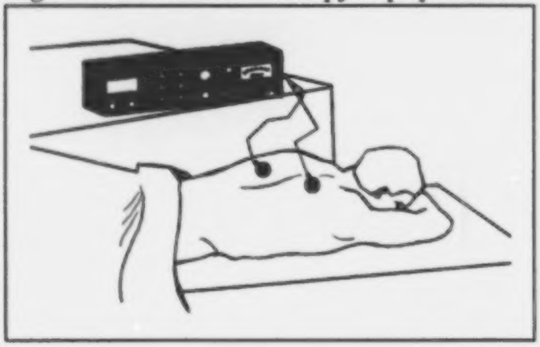
21. Wash hands.

Electrotherapy

Electrotherapy as used in physical therapy employs electrical impulses to relieve pain and stimulate muscles and nerves. Therapists and assistants use various combinations of pads and probes connected by wires to the Electrotherapy unit (Figure 3.10).

The therapist or assistant will teach the aide what is needed to prepare for treatment with a particular electrotherapy device. Only the therapist or assistant adjusts the controlling device and conducts the treatment. The equipment may include a cart with the electrical device, new packaged electrodes, electrode gel, and towels.

Figure 3.10 - Electrotherapy Equipment



Steps of Procedure for Assisting with Electrotherapy:

1. Wash hands.

2. Assemble equipment.

3. Identify and greet patient. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Assist patient in putting on attire appropriate for therapy.

7. Position and drape patient comfortably as directed.

8. Cover patient with sheet.

9. Place electrotherapy equipment near patient.

10. Notify the therapist or assistant that patient is ready for treatment.

11. After treatment is complete, discard used materials in appropriate container.

12. Place used linens in laundry hamper.

13. Store equipment.

14. Notify therapist or assistant that patient is ready for the rest of the treatment.

15. Wash hands.

Exercise

Much of the equipment used in physical therapy is for strengthening and flexibility exercises. Exercise devices may include free weights (e.g., sandbags and dumbbells), wall and overhead pulleys, the shoulder wheel, stall bars, traction machines, exercise bicycles, balance and climbing machines, and treadmills. Some of this general exercise equipment is pictured in Figure 3.11. Some types of exercise equipment require a computer to operate. Parallel bars, tilt tables, and assistive devices will be covered in the ambulation lesson.

Equipment Setup and Take Down

Patients who are familiar with their exercise routine may not need help in setting up for the exercise. Those who use a treadmill or an exercise cycle are good examples. Other patients need minimal help in setting up for their exercises. For example, the aide can help a patient in a wheelchair by positioning the wheelchair in front of wall pulleys and locking the wheels. This enables the patient to safely reach the pulley handholds.

After a patient has transferred to a large exercise mat, the aide may help by bringing sandbags, weights, or other equipment to the patient. For a patient who is very weak, the therapist may decide that a smooth powder board can be used to make exercise easier (Figure 3.12). The powder board is placed under the arm or leg to be exercised. Powder sprinkled on the board or the patient's clothing reduces friction and helps the patient's arm or leg move in a smooth arc on the board.

A quadriceps board (or quad board) is a device used to strengthen the quadriceps muscle. It supports the patient's knee in a bent position while the patient is lying

Figure 3.11 - Common Exercise Equipment

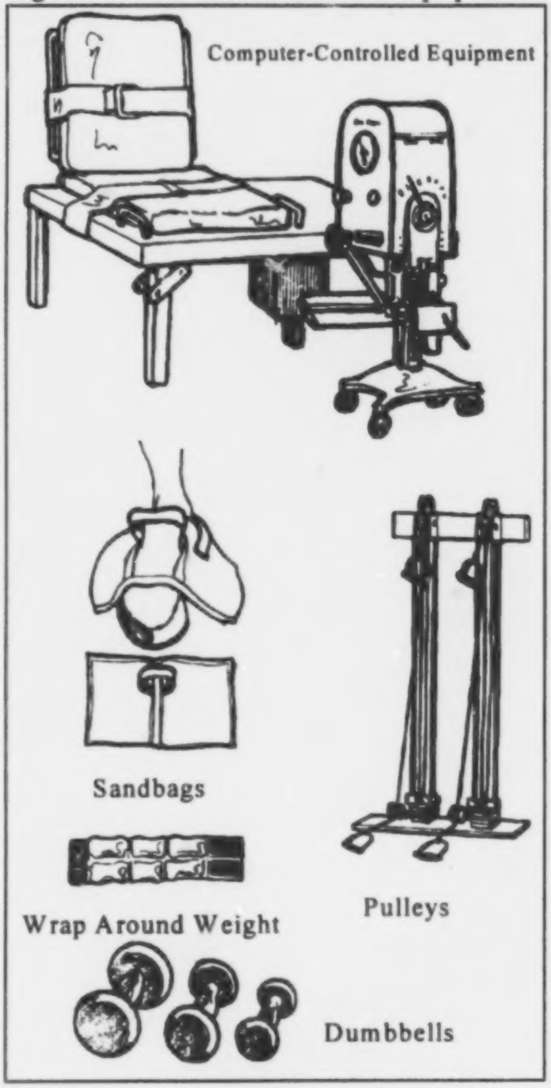
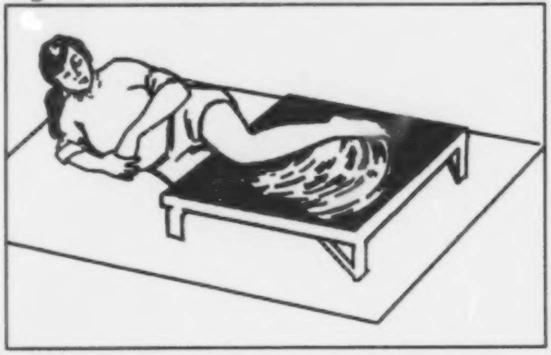
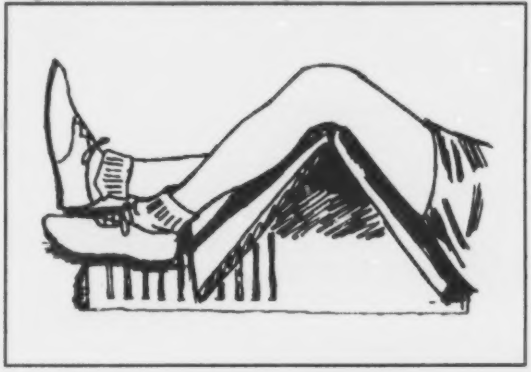


Figure 3.12 - Powder Board



supine on the mat (Figure 3.13). The patient exercises by straightening the knee, often with a weight fastened around the ankle.

Figure 3.13 - Quadriceps Board



These are examples of the kinds of exercise-related therapies with which the aide may assist. Other types of exercise therapies are used in physical therapy and may require the assistance of the aide. Always obtain training before assisting with exercise equipment that is new to you.

Assist with Mechanical Traction

Mechanical traction is the use of a device to stretch various parts of the body.

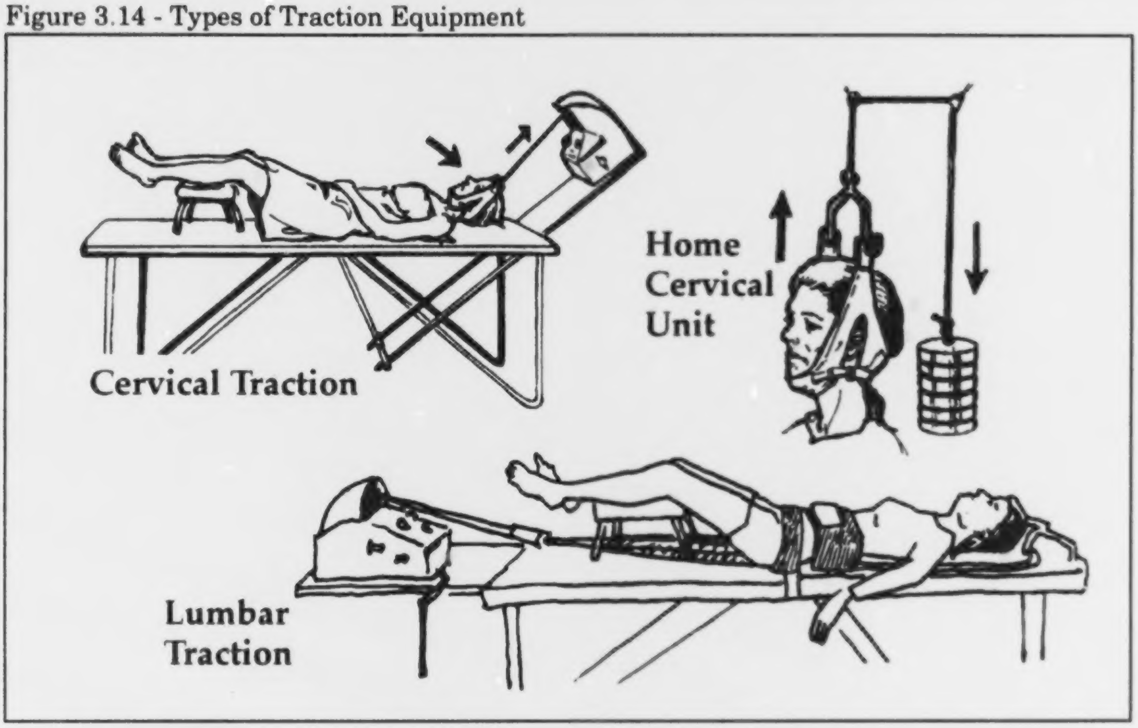
Two common types of mechanical traction are used in physical therapy. They are cervical traction for the neck and lumbar traction for the lower back. Most mechanical traction is used to relieve pain caused by disease or injury to the spine. Cervical and lumbar traction equipment are pictured in Figure 3.14.

If the patient is to be taught to use a home cervical traction unit, the aide may be asked to obtain a traction unit from storage and mark the inventory sheet that indicates a traction unit has been sold or loaned to a patient. The aide may also be directed to open the box and lay the materials out for the patient to put together. This way the patient can learn how to assemble the traction unit before going home. Unlike the simple home traction unit, the physical therapy department uses motorized mechanical traction devices. The aide may assist with cervical or lumbar traction.

Steps of Procedure for Assisting with Cervical Traction:

1. Wash hands.
2. Assemble equipment. Obtain a clean, new traction halter for each new patient. The traction halter fits under the chin and back of the head. If the traction halter is to be reused by this patient, it can be lined with tissue to keep it clean. It should be marked with the patient's name.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Assist patient in putting on proper attire for therapy.
7. Place the halter loosely on the patient.
8. Help the patient sit or lie supine with the head toward the traction unit.
9. Tell the therapist or assistant that the patient is ready for the traction to be set. The therapist or assistant is responsible for adjusting the halter and starting the traction.
10. After treatment, put equipment away.
11. Wash hands.

Figure 3.14 - Types of Traction Equipment



Steps of Procedure for Assisting with Lumbar Traction:

1. Wash hands.
2. Assemble equipment.
3. Identify and greet patient. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Make sure the traction table is locked together.
7. Assist patient in putting on proper attire.
8. Help the patient put on the chest restraint.
9. Help the patient lie down on the traction table with his or her feet toward the traction unit.
10. Have patient raise hips and position the lumbar belt around the patient's hips and fasten it loosely.
11. Fasten the restraint straps to the head of the table.
12. Place a sheet over the patient.
13. Place a call bell or tap bell near the patient.
14. Notify the therapist or assistant that the patient is ready for the traction to be set.
15. After treatment and the therapist or assistant has assisted the patient off of the traction table, return equipment to proper location.

16. Discard used linen in laundry hamper.

17. Wash hands.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

After you have completed the activity sheets, you may take the written unit evaluation. A score of at least 80 percent indicates that you may proceed to the next unit. Check with your clinical site supervisor for skill testing.

Lesson 3: Assisting with Treatment

Activity Sheet

1. List five thermal modalities that use heat.

   a. ______________________ d. ______________________

   b. ______________________ e. ______________________

   c. ______________________

2. List three thermal modalities that are used to cool the body.

   a. ______________________

   b. ______________________

   c. ______________________

3. List four pieces of general exercise equipment commonly used in physical therapy treatments.

   a. ______________________ c. ______________________

   b. ______________________ d. ______________________

4. What must always be available to a patient undergoing a thermal modality treatment when a caregiver is not going to be present during most of the treatment?

   ____

5. If the thermometer in a paraffin bath reads greater than _____°F, the physical therapist or assistant should be notified.

6. What circulates in Fluidotherapy™ to give the patient a light massage?

   ____

7. What are the two common types of mechanical traction used in physical therapy and what parts of the body do they target?

   a. ____

   b. ____

8. Water in the whirlpool tank should be in what temperature range? ______________

Assisting with Treatment, page 4.39

Lesson 3: Assisting with Treatment

Clinical/Laboratory Activity Sheet

1. Identify different types of exercise equipment in your physical therapy department. What kind of treatments are they used for?

2. Identify different types of thermal modalities used in your physical therapy department.

3. Set a clock timer and see if it goes off in 15 minutes.

4. Observe how hot packs are prepared in your facility. Write down the steps for (1) preparing a hot pack, (2) placing the hot pack on the patient, and (3) concluding the hot pack treatment.

5. Observe an ultrasound treatment. Note the supplies and equipment that are used.

6. If permitted by your supervisor, administer a paraffin bath to yourself (one hand only). Observe how hot the paraffin feels as you progress through a series of dips to build a layer of paraffin on your hand. Remove and discard paraffin appropriately.

7. If permitted by your supervisor, observe how a cold pack is prepared for treatment. Practice putting a cold pack on yourself in three ways: (1) after removing a towel from very warm water, wring it out and put it on your skin before placing the cold pack on it; (2) after removing a towel from cool water, wring it out and apply it before the cold pack; (3) place a dry towel under the cold pack. In each case, leave the cold pack on for about five minutes to see how it feels.

8. Practice freezing water in small paper cups, tearing the top edge of paper away, and massaging an area of your body (the opposite arm is convenient) for five minutes to appreciate what the patient feels during an ice massage.

9. Assist in filling a whirlpool tank. Determine the temperature of the water. Observe how a patient is positioned in the whirlpool (arm, leg, whole body), and how the turbines are turned on. Observe how the patient is helped in and out of the water.

10. With your supervisor's permission, assemble a home cervical traction unit according to its instructions. Determine how to put the "cervical halter" on a patient's head.

11. Set up and exercise with the following equipment: powder board with a 5-pound sandbag on your ankle and a quad board with a 5-pound weight on your ankle. Discuss how to make a patient most comfortable while using these pieces of equipment with your clinical site supervisor.

12. Observe the physical therapist or assistant using electrical stimulation.

13. After your clinical supervisor has demonstrated the techniques presented in this lesson, assist the therapist or assistant as directed in the following treatments.

    a. Thermal therapy
        1) Hot pack
        2) Ultrasound
        3) Paraffin bath
        4) Diathermy
        5) Fluidotherapy™
        6) Ice pack
        7) Ice massage

    b. Hydrotherapy

    c. Electrotherapy

    d. Setting up exercise equipment

    e. Mechanical traction
        1) Cervical traction
        2) Lumbar traction

Unit Checklist

Student Name________________________________ **Overall Unit Rating** ______

Activity Sheet: Positioning **Rating** ______

Comments:____

____

____

Clinical/Laboratory Activity Sheet: Positioning **Rating** ______

Comments:____

____

____

Skill Sheet: Move/Assist Patient to Head of Mat (One Person) **Rating** ______

Skill Sheet: Move Patient to Head of Mat (Two Person) **Rating** ______

Skill Sheet: Move Patient to One Side of the Mat **Rating** ______

Skill Sheet: Place Patient in Supine Position for Treatment **Rating** ______

Skill Sheet: Place Patient in Side-Lying Position for Treatment **Rating** ______

Skill Sheet: Place Patient in Prone Position for Treatment **Rating** ______

Activity Sheet: Draping **Rating** ______

Comments:____

____

____

Clinical/Laboratory Activity Sheet: Draping **Rating** ______

Comments:____

____

____

Skill Sheet: Drape Upper Extremity for Treatment (Sitting Position) **Rating** ______

Skill Sheet: Drape Upper Extremity for Treatment (Supine Position) **Rating** ______

Skill Sheet: Drape Lower Extremity for Treatment **Rating** ______

Skill Sheet: Drape for Back Treatment **Rating** ______

Activity Sheet: Assisting with Treatment Rating ______

Comments:______________________________

____

____

Clinical/Laboratory Activity Sheet: Assisting with Treatment Rating ______

Comments:______________________________

____

____

Skill Sheet: Assist with Hot Pack Treatments Rating ______

Skill Sheet: Assist with Ultrasound Treatments Rating ______

Skill Sheet: Assist with Paraffin Bath Rating ______

Skill Sheet: Assist with Diathermy Rating ______

Skill Sheet: Assist with Fluidotherapy™ Rating ______

Skill Sheet: Assist with Ice Pack Treatments Rating ______

Skill Sheet: Assist with Ice Massage Rating ______

Skill Sheet: Assist with Hydrotherapy Rating ______

Skill Sheet: Assist with Electrotherapy Rating ______

Skill Sheet: Assist with Cervical Traction Rating ______

Skill Sheet: Assist with Lumbar Traction Rating ______

Written Unit Evaluation Score ______

Additional Comments:______________________________

____

____

Teacher Signature______________________Date______________

Student Signature______________________Date______________

Unit V

ROM Exercise and Ambulation

The physical therapist aide frequently assists patients with exercise. A type of exercise the physical therapist aide may help a patient perform is called joint range of motion, or "ROM" exercise, which helps the patient maintain joint flexibility.

One of the most important mobility activities carried out in physical therapy is gait training. A patient receives this treatment to improve his or her ability to walk. The physical therapist aide joins with the therapist and assistant as they help a patient take the first steps after an illness or injury. The physical therapist aide continues to help the patient practice ambulating and exercising to improve strength and endurance.

Unit Lessons

Range of Motion Exercises

Ambulation

Lesson 1:
Range of Motion Exercises

Objectives:

A. Identify purposes of ROM exercises.

B. Differentiate between types of ROM exercises.

C. Name and demonstrate directions of movement for each joint.

D. Identify tips that aid in the proper performance of ROM exercise.

E. Provide range of motion exercises for upper extremities.

F. Provide range of motion exercises for lower extremities.

Key Terms:

- Range of motion (ROM) exercise
- Passive ROM
- Active-assistive ROM
- Active ROM
- Resistive ROM
- Flexion
- Extension
- Dorsiflexion
- Plantar flexion
- Abduction
- Adduction
- Lateral rotation
- Medial rotation
- Supination
- Pronation
- Inversion
- Eversion

Purpose of ROM Exercises

The physical therapist aide may assist patients with range of motion exercises to help maintain flexibility and regain strength. **Range of motion (ROM) exercise** means moving the joints through as much of their normal range as possible. It is important for patients to maintain or improve ROM because joint motion is necessary for walking, eating, and all other activities involving body movement. Illness, injury, and hospitalization often mean that patients move very little. Without movement weak muscles and stiff joints occur, and the recovery period may be longer as a result.

Types of ROM Exercises

Range of motion may be passive, active-assistive, active, or resistive, depending on the amount of help provided (Figure 1.1). In **passive ROM** exercises, the patient is relaxed and the caregiver moves the joints through the exercises without help from the

Figure 1.1 - Range of Motion Exercises

Type of ROM Exercise	Patient Role	Caregiver Role
Passive	Does not help	Moves the patient
Active-Assistive	Moves independently as much as possible	Assists the patient to move
Active	Moves without assistance of caregiver	Gives oral instruction and encouragement
Resistive	Moves against pressure given by caregiver	Applies resistance to make the patient work a little harder

patient. When patients can help but need some assistance from the caregiver, **active-assistive ROM** exercises are used. Often active-assistive rather than passive motion is better because it helps the patient get stronger and provides a sense of control that is important for most patients. When the patient only needs oral instructions from the caregiver, he or she does **active ROM** exercises. The caregiver or use of equipment applies a force to make the patient work harder in **resistive ROM** exercises.

Active range of motion exercises can be performed by a patient who is standing, sitting, or lying down. Passive or active-assistive range of motion exercise is usually provided while the patient is lying supine. If it helps the patient relax, a pillow may be placed under the head and another under the knees.

Directions of Joint Movement

The following terms are used in physical therapy to describe the direction of movement of the joints. **Flexion** and **extension** mean bending and straightening the joints. **Dorsiflexion** and **plantar flexion** are special terms that mean bending and straightening the ankle joint. (Plantar refers to the sole of the foot.) **Abduction** and **adduction** are movements away from and toward the midline of the body. **Lateral** and **medial rotation** refer to turning an extremity outward or inward. **Supination** and **pronation** mean to turn up and down. **Inversion** and **eversion** are often used to describe an inward and outward movement of the sole of the foot.

Tips for Performing ROM Exercises

Before starting, explain the range of motion exercise to the patient. It is thoughtful to *give patients a choice* as to where in the exercise series they would like you to start. If one part of the extremity is painful, the patient may wish to leave it to the last or "get it over with" first.

When joints and muscles are painful or stiff, it is sometimes difficult to move them. Always be aware of patient discomfort. It is important that you do not cause additional pain while helping. *Ask the patient if your hand grip is comfortable*. The aide's *grip should be light but firm, supporting as many joints as possible*. Do not let your thumbs and fingertips "dig in." For example, when moving a patient's arm, use one hand to support the patient's wrist, and the other hand to hold the patient's elbow. As the limb is moved, it should be allowed to rotate naturally and the motion should be smooth throughout the exercise. Adjust your hand hold if it seems awkward to you or uncomfortable to the patient. Some patients may have very thin skin that could tear if gripped too tightly.

One key to performing ROM exercises well is to *imagine that you are the patient*. The muscle aches and stiffness everyone experiences after unaccustomed exercise help you understand a little better how the patient may be feeling. Examining how far your own joints move allows you to understand movement that is normal and comfortable. This helps avoid stretching the patient's joints too far. Just remember that motion for some patients will be much more limited than the average healthy person. These patients will hurt if moved too far, even within a normal range of motion. If the patient has one side that is unaffected by the illness or injury, test how far the extremity on that side moves before you exercise the affected side.

Always *use good body mechanics* when giving ROM exercises. If exercises are being provided on an exercise mat, it is often a good idea for the aide to put one knee on the mat for better body mechanics and balance. Kneeling on the mat beside the patient is also acceptable. Shift your weight from one side to the other as you follow through the motion.

The number of repetitions of each motion depends on patient need and may vary from two to 15. The aide should check with the therapist to *find out the recommended number of repetitions*. Four to eight repetitions are frequently recommended. A higher number of repetitions and a more prolonged stretch are often given in the direction of the motion that seems to be more tight or limited for the patient.

Upper Extremity ROM

Range of motion for the upper extremities (arms) often starts with the shoulder and moves to the elbow, wrist, fingers, and thumb. Motions for the upper extremity are described in Figure 1.2.

Steps of Procedure for Upper Extremity Range of Motion Exercises:

1. Wash your hands.

Figure 1.2 - Motions of the Upper Extremities

Joint & Motion	Description
Shoulder	
Flexion/Extension	Move the arm forward and up over the head, and back to the side.
Abduction/Adduction	As you bring the arm out to the side and up beside the head, let the arm rotate freely.
Lateral/Medial Rotation	Bend the elbow to a right angle and rotate the arm at the shoulder.
Elbow	
Flexion/Extension	Bend and straighten the elbow.
Supination/Pronation	Bend elbow and rotate palm up and down.
Wrist	
Flexion/Extension	Bend hand forward and backward at the wrist; let fingers move freely.
Abduction/Adduction	Move the hand side to side at the wrist.
Fingers	
Flexion/Extension	Close the fingers and thumb into a fist, then extend fingers; let the wrist move freely.
Abduction/Adduction	Spread fingers and thumb apart and bring back together.
Thumb Opposition	Bend the thumb toward the base of little finger and back.

2. Identify and greet patient. Identify self.

3. Explain what you are going to do.

4. Provide privacy. Make sure patient is wearing appropriate clothing.

5. Assist patient into supine position.

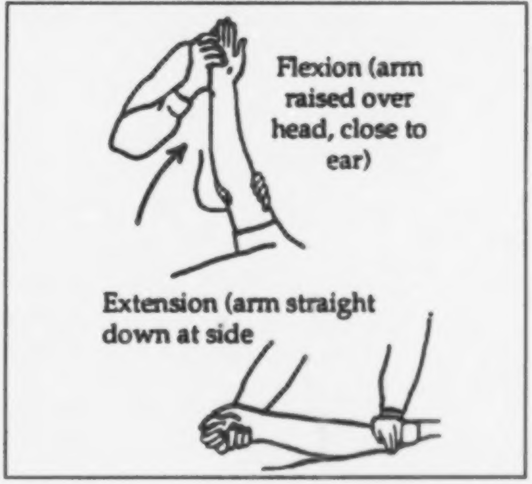
6. Shoulders

    a. Flexion/extension (Figure 1.3)

        (1) Support the arm at the wrist and elbow, and lift the arm toward the ceiling. Continue lifting the arm over the patient's head until you feel resistance.

        (2) Slowly lower the arm to the patient's side.

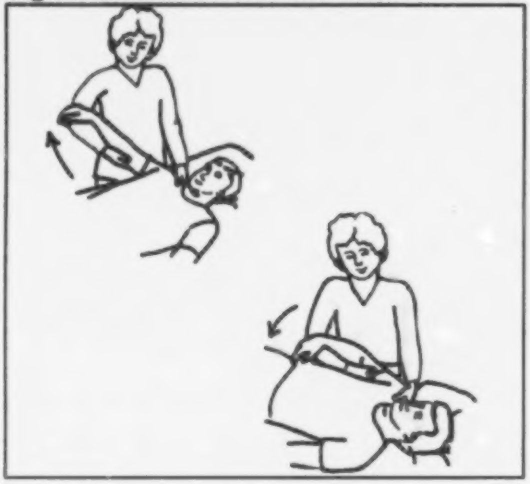
Figure 1.3 - Flexion/Extension


Flexion (arm raised over head, close to ear)
Extension (arm straight down at side

    b. Abduction/adduction (Figure 1.4)

        (1) Support the arm at the elbow and shoulder, and move the arm out to the side, continue moving toward patient's head.

Figure 1.4 - Abduction/Adduction



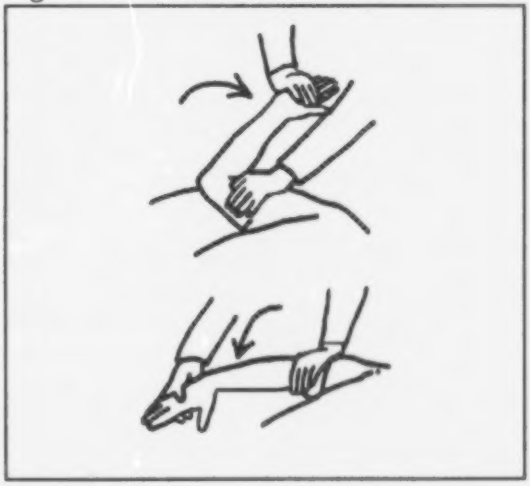
        (2) Slowly move the arm back toward the center of body.

    c. Lateral/medial rotation (Figure 1.5)

        (1) Move the arm away from the body to shoulder level.

        (2) Bend the elbow at a 90° angle. Rotate the hand forward to touch the mat and then backward to touch the mat.

Figure 1.5 - Lateral/Medial Rotation



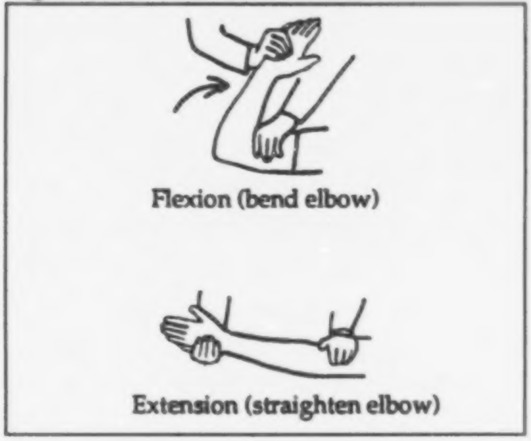
7. Elbow

   a. Flexion/extension (Figure 1.6)

      (1) Bend the arm at the elbow.

      (2) Bring the hand toward the shoulder, then straighten the arm.

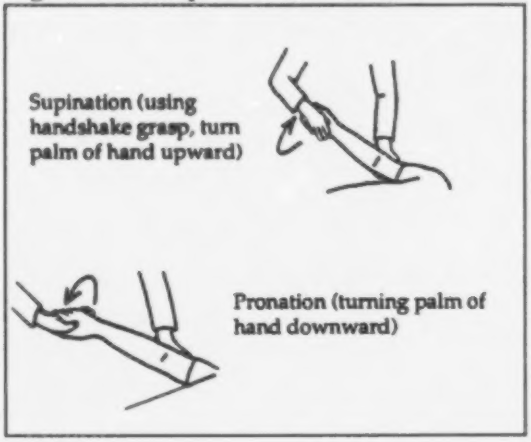
Figure 1.6 - Flexion/Extension


Flexion (bend elbow)
Extension (straighten elbow)

   b. Supination/pronation (Figure 1.7)

      (1) Hold the patient's hand in a handshake position; support the arm at the elbow joint with the elbow bent.

Figure 1.7 - Supination/Pronation

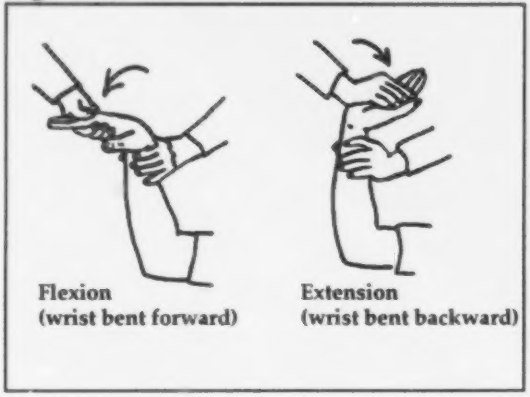

Supination (using handshake grasp, turn palm of hand upward)
Pronation (turning palm of hand downward)

      (2) Turn palm up and then down.

8. Wrist

   a. Flexion/extension - support arm and hand; bend the wrist forward, straighten it, and then bend it backward (Figure 1.8).

Figure 1.8 - Flexion/Extension

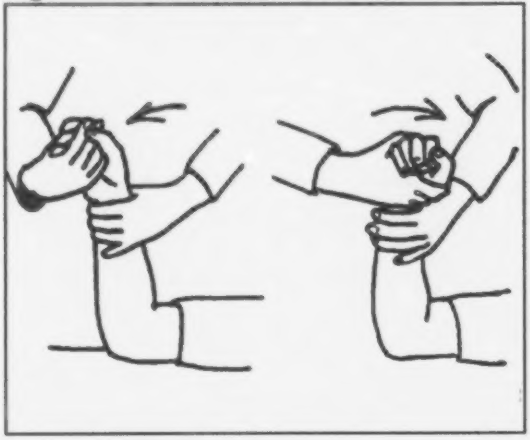

Flexion
(wrist bent forward)
Extension
(wrist bent backward)

   b. Abduction/adduction - move the hand from side to side at the wrist (Figure 1.9).

9. Fingers

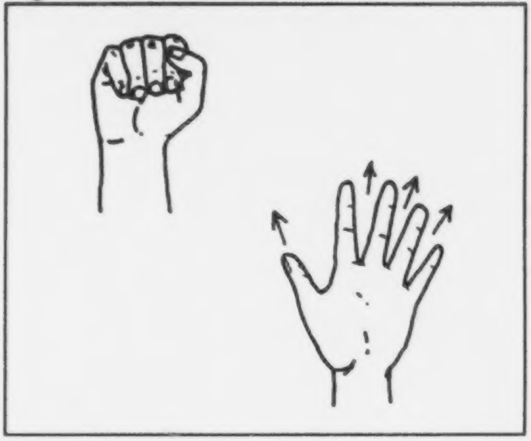
   a. Flexion/extension - support the hand at the wrist; gently straighten the fingers and thumb, then curl

Figure 1.9 - Abduction/Adduction



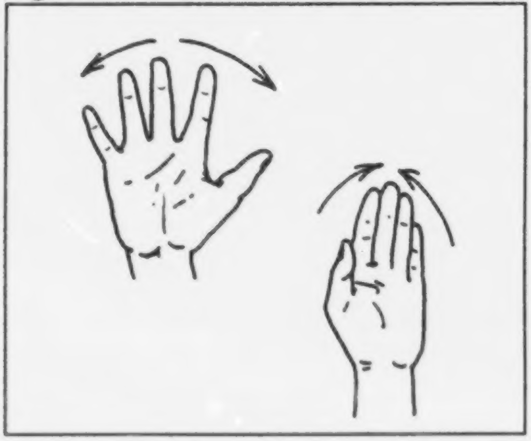
the fingers and thumb (Figure 1.10).

Figure 1.10 - Flexion/Extension



b. Abduction/adduction - move each finger away from the nearest finger and then return it (Figure 1.11).

Figure 1.11 - Abduction/Adduction



c. Thumb opposition - bend the thumb toward the base of the little finger and back.

10. Repeat with opposite arm.

11. Make the patient comfortable.

12. Wash your hands.

13. Notify therapist that patient is ready for next treatment.

Lower Extremity ROM

Range of motion exercises for the lower extremities require extreme caution. It is very important to use good body mechanics because the patient's lower extremities are heavier than the upper extremities. The leg that is not being exercised should lie flat on the mat's surface. The motions for the lower extremity are described in Figure 1.12.

Steps of Procedure for Lower Extremity Range of Motion Exercises:

1. Wash your hands.

2. Identify and greet patient. Identify self.

3. Explain what you are going to do.

4. Provide privacy--make sure patient is wearing appropriate clothing.

5. Assist patient into supine position.

6. Knee flexion/extension

   a. Support the leg at the ankle and calf, flex the leg at the hip and knee.

   b. Bend and straighten the knee.

7. Hip

   a. Flexion/extension

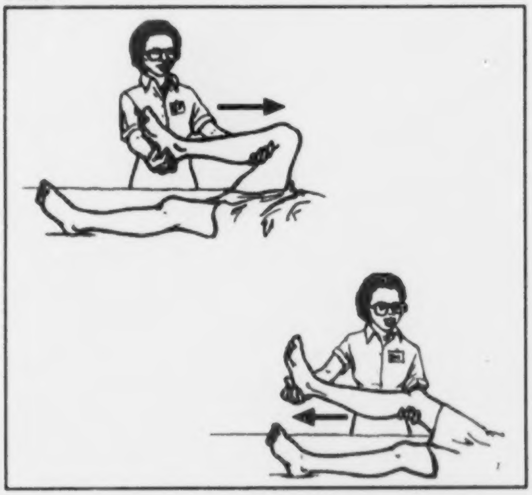
      (1) Bend the knee and move it toward the chest, flexing the hip. Slowly straighten the hip and knee (Figure 1.13).

Figure 1.12 - Motions of the Lower Extremities

Joint & Motions	Description
Hip	
Flexion/Extension	Bend and straighten the hip; do first with knee bent, then with knee straight.
Abduction/Adduction	Bring the leg straight out to the side and back; keep toes pointed toward the ceiling.
Lateral/Medial Rotation	With leg lying flat on the mat; roll the leg out and then in.
Knee	
Flexion/Extension	Bend and straighten the knee.
Ankle and foot	
Dorsiflexion/Plantar Flexion	The ankle is usually flexed to start with; the important motion is dorsiflexing the ankle, moving the foot and toes up toward the body.
Inversion/Eversion	Turn the sole of the foot in and out.
Toes	
Flexion/Extension	Bend the toes up and down.
Abduction/Adduction	Spread the toes and move them together.

(2) Support the leg at the knee and ankle, keep the knee straight; raise leg slowly and then lower.

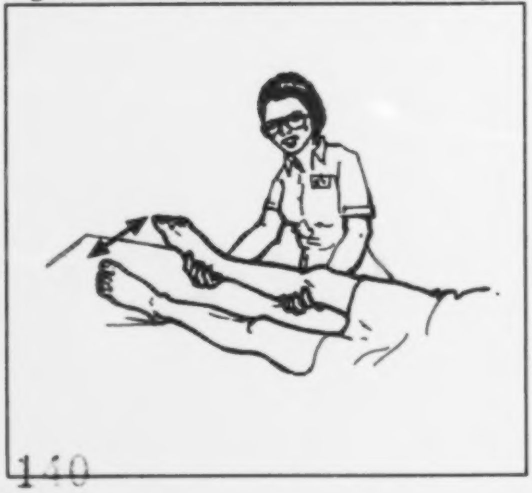
Figure 1.13 - Flexion/Extension - Hip and Knee



b. Abduction/adduction (Figure 1.14)

(1) Slowly move the leg straight out to the side of the body until you feel resistance.

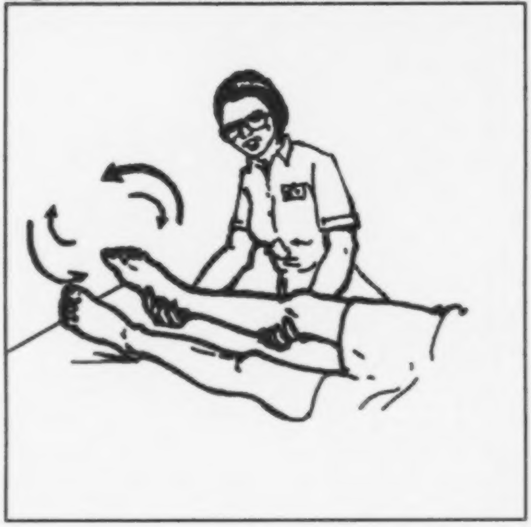
Figure 1.14 - Abduction/Adduction - Hip



(2) Move the leg back toward the center of the body.

c. Lateral/medial rotation - with leg lying flat on mat, roll the leg to produce lateral and medial rotation of the hip (Figure 1.15).

Figure 1.15 - Lateral/Medial Rotation - Hip



8. Ankle and foot

   a. Dorsiflexion/plantar flexion - bend the foot up toward the knee, then down (Figure 1.16).

   b. Inversion/eversion - support the foot at the ankle joint. Turn the sole toward the opposite foot and then away from the opposite foot (Figure 1.17).

9. Toes

   a. Flexion/extension - bend and then straighten the toes (Figure 1.18).

Figure 1.16 - Dorsiflexion/Plantar Flexion

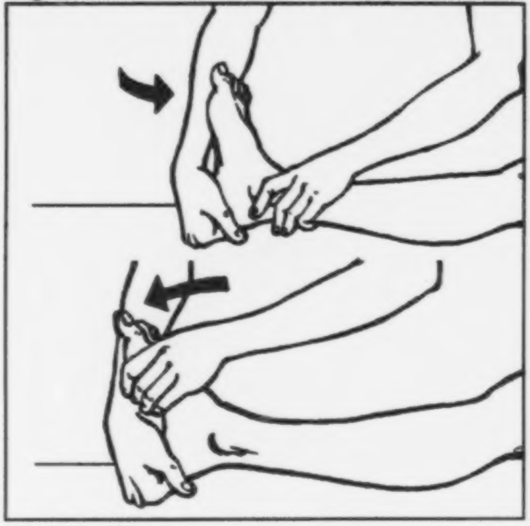
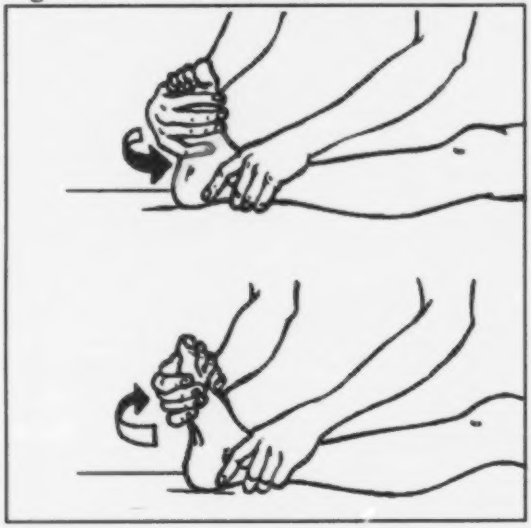


Figure 1.17 - Inversion/Eversion



   b. Abduction/adduction - move each toe away from the next toe and then toward the next toe (Figure 1.19).

10. Repeat with opposite leg.

11. Make the patient comfortable.

12. Wash your hands.

Figure 1.18 - Flexion/Extension

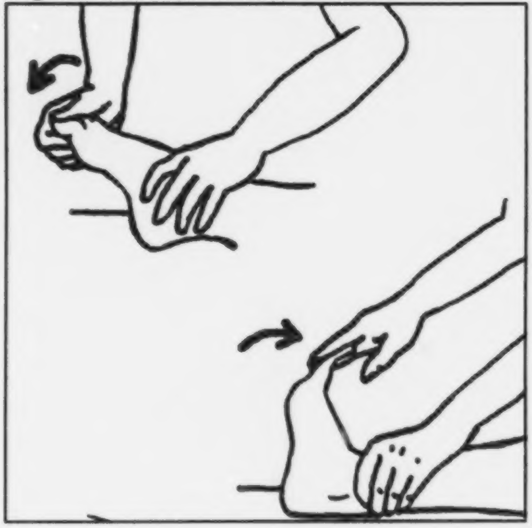
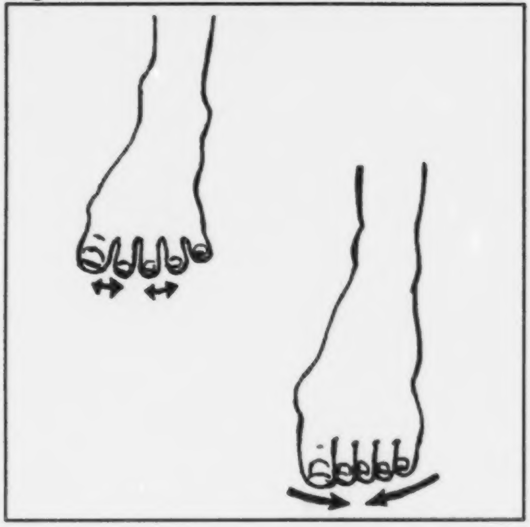


Figure 1.19 - Abduction/Adduction



13. Notify therapist that patient is ready for next treatment.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

Lesson 1: Range of Motion Exercises

Activity Sheet

1. Why is it important to maintain or improve a patient's range of motion?

____

____

2. What tips should be followed when giving ROM exercises?

   a. ____

   b. ____

   c. ____

   d. ____

   e. ____

   f. ____

3. Name the joint motions at the following.

   a. Shoulder: __________________________________

   b. Elbow: ___________________________________

   c. Wrist: ___________________________________

   d. Fingers and thumb: ____________________________

   e. Knee: ___________________________________

   f. Hip: ____________________________________

   g. Ankle and foot: _____________________________

   h. Toes: ___________________________________

4. What is the difference between active and passive range of motion exercise?

5. What can the aide do to better understand what the patient is experiencing in ROM exercises?

6. What role does the aide have in resistive ROM exercises?

Lesson 1: Range of Motion Exercises

Clinical/Laboratory Activity Sheet

1. With wrist and ankle weights, perform the range of motion exercises described in this lesson. Do enough repetitions to fatigue your muscles. Repeat this process and number of repetitions for three consecutive days. Write down a description of how you feel before and after each exercise period and hand it in to your instructor for discussion.

2. After your clinical supervisor demonstrates the proper technique for range of motion exercises, work with another physical therapy student or health occupations student to practice them. Have the "patient" role-play both passive and assistive roles to help the caregiver feel the difference.

3. When approved by your clinical site supervisor, assist patients with performing ROM exercises.

The physical therapist aide may be the only one to provide supervision and encouragement once the patient can ambulate needing only standby or contact assistance. Safety is very important during these practice sessions while the patient is regaining strength, endurance, and confidence for walking.

Following these precautions during ambulation is very important:

- Lock the wheels on the wheelchair.
- Put a gait belt (also called a transfer belt) on the patient.
- Put shoes or good quality house slippers on the patient (make sure they have nonskid soles).
- Have sufficient personnel available to assist the patient if there are difficulties.
- Observe the patient carefully to watch for signs of excessive fatigue or faintness.
- Always have a plan for sitting the patient down. Have a chair nearby in case the patient cannot make it back to the wheelchair.
- If contact assistance is necessary, stay close to the patient with one hand on the gait belt and the other on the patient's shoulder.

It is extremely important to keep the patient from falling. If the above precautions are observed, it is unlikely a patient will lose his or her balance or become faint enough to fall.

If a patient starts to fall and you are unable to help the patient regain balance, lower the patient to the floor by holding onto the gait belt and the patient's shoulder. Use your thigh to slide the patient down to the floor. This prevents the patient from hitting the floor in a hard fall. Be especially protective of the patient's head.

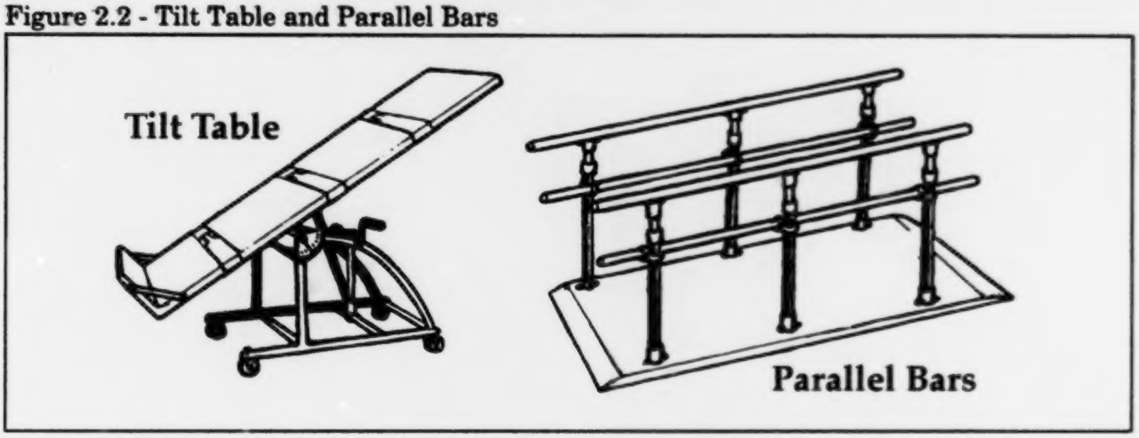
Weight-Bearing Categories

When a patient has a fracture, the extremity often requires a cast. If the fracture is in the leg, hip, or foot area, the patient may not be able to put any weight on the leg. As the fracture heals, more and

Figure 2.1 - Weight-Bearing Categories

Weight-Bearing Category	Weight-Bearing Description	Equipment
Nonweightbearing	Able to place no weight on an extremity.	Parallel bars, walker, crutches
Toe or touch weight bearing	Able to touch the toe or sole of foot lightly to the floor for balance.	Parallel bars, walker, crutches
Partial weight bearing	Able to place a portion of the body weight on an extremity; often expressed as a percentage of body weight.	Parallel bars, walker, crutches
Full weight bearing	Able to place entire weight of body on an extremity--usually a leg.	Parallel bars, walker, crutches, cane

Figure 2.2 - Tilt Table and Parallel Bars



more weight can be placed on the leg. Other conditions, such as surgery to repair ligaments in the knee or ankle, may require the patient to reduce the amount of weight on a leg. It is very important to know how much weight, if any, the patient can bear.

There are four weight-bearing categories: (1) **nonweightbearing**, (2) **toe or touch weight bearing**, (3) **partial weight bearing**, and (4) **full weight bearing**. Before you ambulate a patient, you should be absolutely certain about the amount of weight a patient is allowed to put on the affected leg. Categories of weight bearing and their descriptions appear in Figure 2.1. To help the patient understand partial weight bearing, sometimes the physical therapist helps a patient press down on a bathroom scale with the affected foot

Types of Ambulation Devices

Preambulation Aids

Tilt Table - Patients who have not been on their feet for a long time may be placed on a tilt table (Figure 2.2) to gradually get them used to being in the upright position. The aide often helps transfer the patient from a gurney to a tilt table by a sliding transfer.

Parallel Bars - Many patients begin ambulating by using the parallel bars. Parallel bars are stable and sturdy, and enable the patient to use upper body strength for support to practice getting up and walking (Figure 2.2). This allows the patient to gradually regain strength, endurance, and confidence in his or her legs before starting to walk with a walker, crutches, or cane.

Ambulation Aids

It is important to become familiar with ambulation aids. Walkers, crutches, and canes are the three common types (Figure 2.3). All these devices *must* have nonskid rubber tips for traction. Rubber tips should be driven securely onto the end of the crutch or cane. If rubber tips wear out to the extent that metal or wood contacts the floor, they must be replaced.

The type of ambulation device selected as an ambulation aid is prescribed by the patient's physician or selected by the therapist. The aid chosen will depend on the patient's weight-bearing status, balance, strength, and previous experience. To avoid injury to the patient or caregiver, the patient must use the device ordered for him or her.

Lesson 2:
Ambulation

Objectives:

A. Explain the aide's role in gait training.

B. Identify safety precautions to follow when ambulating patients.

C. Demonstrate four weight-bearing categories.

D. Identify types of ambulation devices.

E. Ambulate patient with a walker.

F. Identify types of crutch ambulation patterns.

G. Ambulate patient with crutches.

H. Ambulate patient up and down stairs with crutches.

I. Ambulate patient with a cane.

J. Ambulate patient with gait belt only.

Key Terms:

- Gait training
- Maximal assistance
- Ambulation
- Contact assistance
- Standby assistance
- Nonweightbearing
- Toe or touch weight bearing
- Partial weight bearing
- Full weight bearing

Gait Training

The physical therapist or assistant provides gait training. **Gait training** is the process of teaching the patient to walk. Some forms of training, such as balance, speed, and rhythm training, do not require assistive devices. However, gait training often requires the use of a walker, crutches, or a cane.

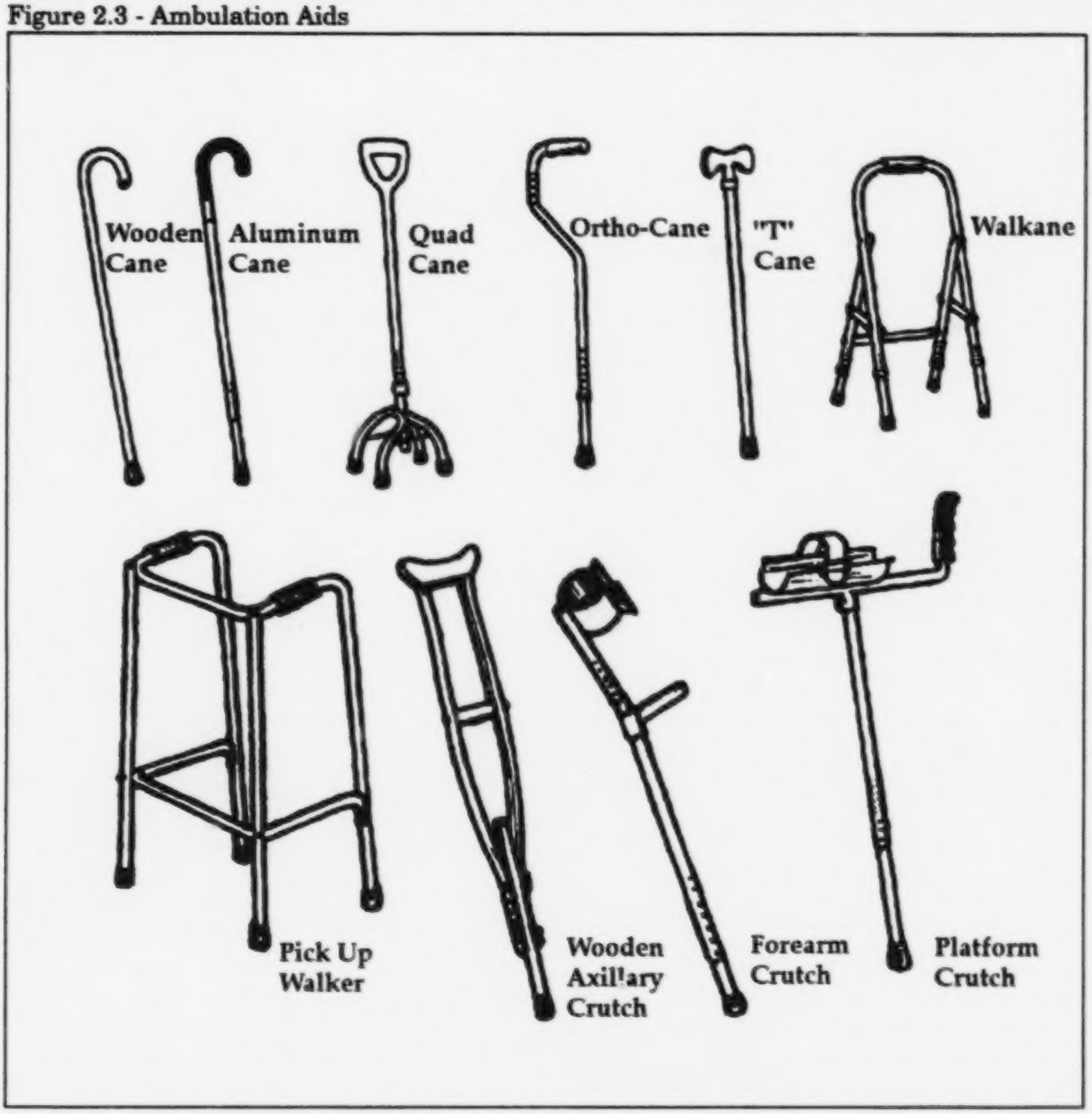
Maximal assistance in gait training means the amount of assistance required by a patient who is very weak. The therapist or assistant will direct the aide how to assist. For example, the aide may help support the patient with the gait belt or position and steady a wheelchair when a patient is being seated.

When a patient has been injured or hurt, the first attempts to relearn to ambulate can be difficult because of weakness, pain, lack of coordination, loss of balance, or fear. During gait training, patients must be protected from falling while they are regaining strength and learning to compensate for body changes.

Ambulation

Once the patient has mastered the basics of gait training, the aide may assist the patient with ambulation. In physical therapy, **ambulation** is walking practice that reinforces the skills that the patient has learned during gait training. During ambulation, the aide may provide contact assistance or standby assistance. **Contact assistance** means the direct hand or other body contact given the patient by the caregiver during ambulation and other movement activities. **Standby assistance** means that the caregiver is close to the patient, but has no direct contact.

Figure 2.3 - Ambulation Aids


Wooden Cane
Aluminum Cane
Quad Cane
Ortho-Cane
"T" Cane
Walkane
Pick Up Walker
Wooden Axillary Crutch
Forearm Crutch
Platform Crutch

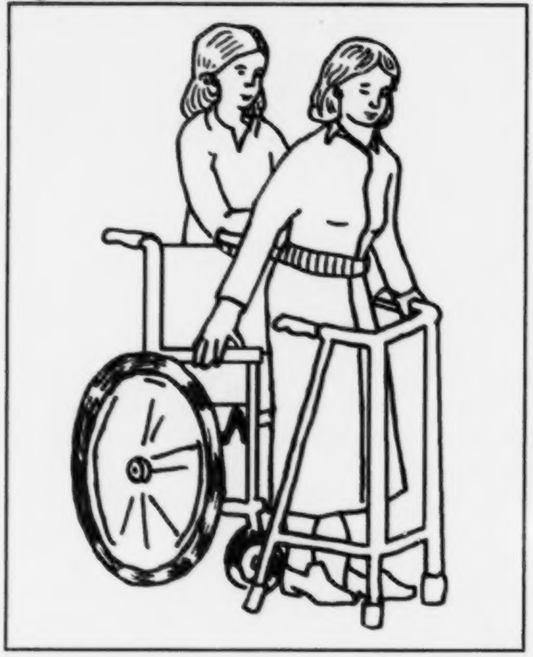
Ambulating with a Walker

There are many types of walkers based on the patient's need. Some walkers require the patient to pick them up; others are on rollers. Walkers are available in large adult, adult, and child sizes. They may fold to save space. Walkers allow nonweight-bearing to full weight bearing ambulation and everything in between. Before ambulating a patient with a walker, clearly understand the weight-bearing status of the patient. Many patients will have one lower extremity that is weaker than the other.

Steps of Procedure for Ambulating a Patient with a Partial Weight-bearing Gait Using a Walker and Contact Assistance:

1. Wash your hands.
2. Identify and greet patient. Identify self.
3. Explain that you are going to practice walking with a walker.
4. Assist patient to sit on edge of chair. Make sure patient has on appropriate attire for ambulation.
5. Give patient gait belt to put around waist. Assist if needed.
6. Place walker in front of patient and grasp gait belt in back.
7. Stand on patient's affected side. NOTE: Use good body mechanics throughout procedure.
8. Continue to hold gait belt in one hand and hold patient's shoulder in other hand.
9. Ask the patient if he or she is ready to walk. Ask patient to stand by pushing up with arms. Assist patient by lifting on gait belt (Figure 2.4).
10. Observe that patient grasps walker after standing up.
11. Pause to allow patient to regain balance.
12. Instruct patient to move walker forward by lifting it up.
13. Observe that patient takes a step forward with the affected leg first.

Figure 2.4 - Walker Ambulation



14. Walk patient the distance instructed by therapist.
15. Return patient to mat or chair. To ambulate backward, resident steps back with strong foot, takes a step back with affected foot, then moves the walker back. Have patient feel for seat of chair or mat with back of legs.
16. Observe that patient reaches back with both hands and sits down slowly.
17. Make sure patient is comfortable.
18. Place walker out of the way.
19. Remove gait belt.
20. Wash your hands.
21. Record observations.

Patients who use a walker rarely need to use the walker on stairs. If the patient must use stairs, either a special stair-walker is required, or the patient can hold the walker frame with one hand, angle the walker on the stairs, and use the stair handrail to provide stability.

Patients also need to learn how to go up and down a curb with a walker. The walker must be placed completely up or down on the next level. Never allow the patient to tilt the walker with only two of the legs on the next level; the walker is likely to tip, causing the patient to fall. It is often easier to have the patient step up on the curb backward, then lift the walker and swing it around to the front.

Ambulating with Crutches

Crutches are available in a variety of styles and sizes. They are adjustable in height and may be made of aluminum or wood. They may also be modified with a forearm platform for patients who must bear weight on their elbows instead of their hands or wrists.

Crutch Ambulation Patterns

Several crutch ambulation patterns are available, depending on the amount of weight the patient is able to place on the affected lower extremity. The three-point gait is most frequently used because the patient can progress from nonweightbearing to full weight bearing ambulation.

A three-point gait can be used if a patient is nonweightbearing, touch weight bearing, or partial weight bearing. The three points are the two crutches and the unaffected foot. In a three-point gait, the two crutches are moved forward, then the unaffected leg swings up to or beyond the crutches to strike the floor.

In a nonweightbearing gait, the affected leg is held up by hiking the hip and bending the knee. In a touch or partial weight-bearing gait, the foot on the affected side is allowed to barely touch down for balance, or the patient is allowed to put some weight on the leg. The patient's physical therapist will instruct you about how much weight the patient is allowed to put on the leg.

If the patient can bear partial to full weight on an affected extremity, the four-point gait can be used. In the four-point gait, the crutch on the affected side is moved, then the opposite lower extremity. The crutch on the unaffected side is moved and then the affected extremity is brought forward. All four "points" are moved separately.

When the patient is secure with this gait, he or she may move a crutch and the opposite lower extremity forward at the same time, alternating sides. This allows the patient to move much more quickly.

Steps of Procedure for Ambulating a Patient with Three-point, Nonweightbearing Gait Using Crutches and Contact Assistance:

1. Wash hands.
2. Identify and greet patient. Identify self.
3. Explain that you are going to practice walking with crutches.
4. Make sure patient has on appropriate attire for ambulation.
5. Assist patient to move away from the back of the chair resting heel of affected leg on floor.
6. Give gait belt to patient to put around waist, assisting if necessary.

7. Stand on the side of the patient's affected leg. Position crutches to front and side of chair on affected side, and have patient hold crutches at handholds. NOTE: Use good body mechanics throughout procedure.

8. Ask patient if he or she is ready to stand up; grasp gait belt in back with one hand, and place opposite hand lightly at patient's shoulder (Figure 2.5).

9. Ask patient to stand up without putting weight on affected foot. Give patient a moment to regain balance.

10. Observe as patient uses free hand to grasp the hand hold of a crutch and place it under arm on unaffected side.

11. Observe as patient rotates other crutch around and under arm on affected side.

12. Allow patient time to adjust clothing and crutches for comfort and to be sure crutches are securely under arms.

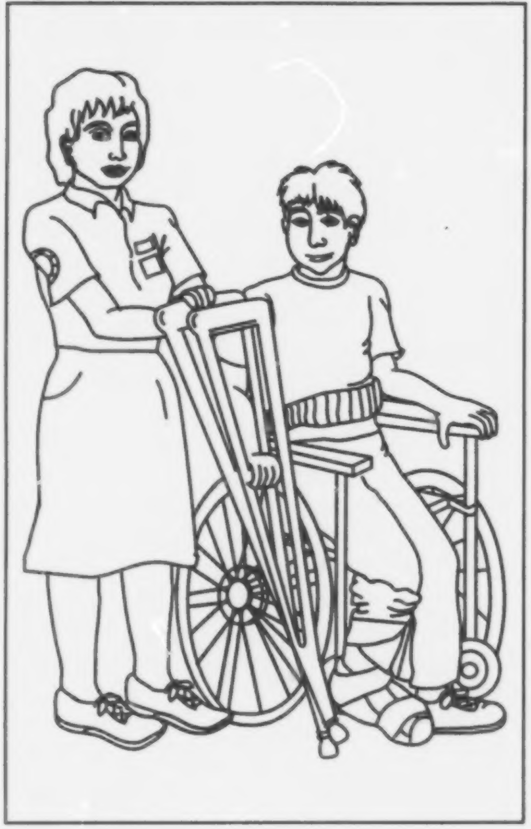
13. Ask patient if he or she is ready to ambulate. Have patient hold affected leg off floor and move crutches forward, steadying at gait belt and shoulder if necessary.

14. Remain in contact with the patient as he or she patient presses down with hands and swings unaffected foot forward, keeping affected foot off floor.

15. Continue ambulating to the specified distance. Return patient to chair, allowing patient to back up to the chair until the back of the unaffected leg touches it.

16. Remain in contact while patient takes crutch out from under arm on affected side and holds it by the handpiece.

Figure 2.5 - Crutch Ambulation



17. Observe as patient takes crutch out from under unaffected side and moves it to the hand on the affected side so that the two crutches are lined up.

18. Observe and assist as necessary as patient reaches back to grasp arm of chair on unaffected side and sits down.

19. Move crutches out of the way.

20. Assist patient in removing gait belt and assuming comfortable position in chair.

21. Wash hands.

22. Record observations.

The expression "Up with the good, and down with the bad" is used to help patients (and therapists and aides) remember which foot to move first when going up and down stairs with crutches. This system is used to maintain a firm three-point stance and lessen the chance of hurting the affected leg.

Steps of Procedure for Ambulating a Patient Up and Down Stairs with Crutches:

To go up the stairs

1. Patient stands at base of stairs. Stand behind patient with one hand on patient's gait belt, and other hand on patient's shoulder.
2. The patient must step up first with the unaffected, or stronger, leg.
3. Then the affected, or weaker, leg is brought up.
4. Direct patient to bring up both crutches. Allow patient to regain balance.
5. Repeat process up the stairs.

To go down stairs

1. Patient stands at top of stairs.
2. Stand in front of the patient, two or three steps down, with one hand on the belt, the other hand at the patient's shoulder.
3. The crutches are moved down first.
4. The affected leg is moved down.
5. The unaffected is lowered last.
6. Repeat process down the stairs.

Ambulating with a Cane

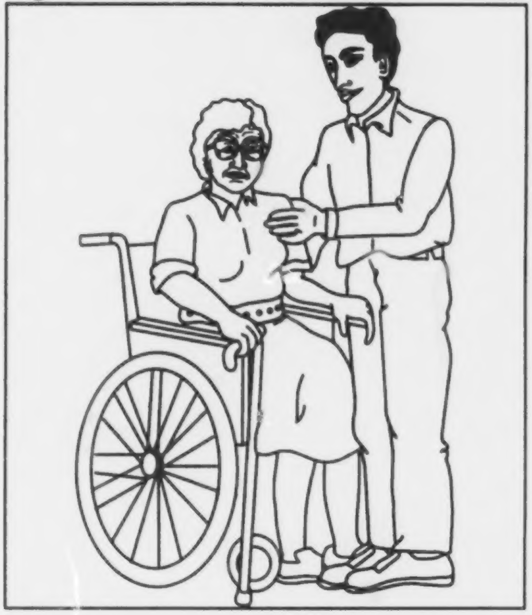
Canes may be wooden or metal. Metal canes are usually adjustable for height. Quad canes have four legs that provide a wider base; they are more stable than a single tip cane.

A person must be able to bear full weight to use a cane. It is used to maintain balance and relieve pain. The cane should be held in the hand *opposite* the weak or painful lower extremity. When people walk, the leg and the opposite hand swing forward at the same time. When ambulating with a cane, the cane becomes an extension of the arm. Therefore, holding the cane in the opposite hand promotes a more natural walking pattern. In movies and on television, a person's limp is exaggerated by putting the cane in the same hand as the weak leg.

Steps of Procedure for Ambulating a Patient Using a Cane and Contact Assistance:

1. Wash your hands.
2. Identify and greet patient. Identify self.
3. Explain that you are going to practice walking with a cane.
4. Assist patient to scoot to edge of mat or chair. Make sure patient has on appropriate attire.
5. Have patient put gait belt around waist, assisting as needed.
6. Stand on patient's weak side. Place one hand on the gait belt and the other hand on the shoulder (Figure 2.6). NOTE: Use good body mechanics throughout the procedure.

Figure 2.6 - Cane Ambulation



7. Ask patient if he or she is ready to walk, and have patient stand on command. Assist the patient to a standing position by lifting on the gait belt.

8. Pause to allow patient to regain balance.

9. Remind patient to move cane forward and a little out to the side of the strong leg. Patient should take short steps, and keep head up and eyes looking forward.

10. Observe that patient moves weak extremity forward to line up evenly with tip of cane just after cane is placed.

11. Observe that patient puts weight on cane and weak foot while swinging strong foot forward, taking a step.

12. Walk in the same pattern as the patient (both step with same foot at the same time).

13. Walk the distance instructed by therapist.

14. Return patient to mat or chair and assist patient to sit by backing up until legs touch seat.

15. Observe that patient reaches back with both hands and sits down slowly.

16. Make certain the patient is comfortable in the chair and the cane is placed out of the way.

17. Remove gait belt.

18. Wash your hands.

19. Record observations.

To go up stairs with a cane, the patient should use the handrails for stability whenever possible. Notice this procedure is slightly different than going up and down stairs with crutches. The cane moved at the same time as the affected foot instead of by itself. The unaffected foot goes up first, followed by the cane, then the affected foot.

To go down stairs, the cane and the affected foot go down first, followed by the unaffected foot.

While going up or down stairs, the patient may alternate steps or move both feet to one step before going to the next.

Ambulating with a Gait Belt Only

Sometimes a patient needs to practice walking to increase strength and endurance but is able to do so without a device. Check with the patient's therapist to see if contact assistance or standby assistance is needed. The physical therapist aide should be prepared to assist by always having a gait belt on the patient and having a plan of where the patient will sit if he or she needs to rest.

Steps of Procedure for Ambulating a Patient Using a Gait Belt Only and Contact Assistance:

1. Wash your hands.

2. Identify and greet patient. Identify self.

3. Explain and greet patient. Identify self.

4. Assist patient to sit on edge of chair. Make sure patient's attire is appropriate for ambulation.

5. Give patient gait belt to put around waist, assisting as necessary.

6. Stand on patient's weaker side. Place one hand on the gait belt, and the other at the patient's shoulder.

7. Ask patient if he or she is ready to walk. Ask patient to stand by using arms to push up on arm rests. Assist patient as needed by lifting on gait belt.

8. Pause to allow patient to regain balance.

9. Walk in the same pattern as the patient (both step with same foot at the same time).

10. Walk patient the distance instructed by therapist.

11. Return patient to chair. Have patient back up to chair and lower self slowly with arms.

12. Make sure patient is comfortable.

13. Remove gait belt if finished ambulating.

14. Wash your hands.

15. Record observations.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

After you have completed the activity sheets, you may take the written unit evaluation. A score of at least 80 percent indicates you may proceed to the next unit. Check with your clinical site supervisor for skill testing.

Lesson 2: Ambulation

Activity Sheet

Student Name ________________________________ Date ______________

1. List seven safety precautions to follow when ambulating patients.

   a. ____

   b. ____

   c. ____

   d. ____

   e. ____

   f. ____

   g. ____

2. Name and describe the four weight-bearing categories.

   a. ____

   b. ____

   c. ____

   d. ____

3. What ambulation aid can be used only if the patient can bear full weight?

   ____

4. What two ambulation aids can be used if the patient is to be nonweightbearing?

   a. ____

   b. ____

5. List two pieces of preambulation equipment found in the physical therapy department.

   a. ____

   b. ____

6. Why is the three-point pattern most frequently used for crutch ambulation?

7. In which hand should a person with a painful, weak left leg hold a cane?

8. When getting ready to ambulate with crutches, on which side do the crutches begin?

9. When going up stairs with crutches, which leg leads, the affected or the unaffected?

10. When going down stairs with a cane, which foot leads, the affected or the unaffected?

11. Where does the aide stand when ambulating patients using the following ambulation aids?

    a. Walkers: __________

    b. Canes: __________

    c. Crutches: __________

12. What is maximal assistance?

13. When is a gait belt used alone to ambulate a patient?

Lesson 2: Ambulation

Clinical/Laboratory Activity Sheet

Student Name ____ Date ______________

1. Check out the various ambulation aids at your clinical site. Inspect the rubber tips for wear and replace as needed.

2. If a scale is available, practice putting 10 percent, 25 percent, and 50 percent of your weight on it with one foot.

3. Ask your clinical supervisor to demonstrate the techniques you have studied in this lesson. With the help of a classmate, practice the following techniques. If the class is large enough, practice with another physical therapist aide student; if not, ask another health occupations student for assistance. Alternate between role-playing the patient and the physical therapist aide. Once you are confident in your abilities, ask your clinical supervisor if you can assist with patient ambulation activities.

    a. Adjust a walker to fit your partner. After putting on a gait belt, assist your partner to stand and ambulate with partial weight bearing.

    b. Assist a partner to ambulate with a three-point, nonweightbearing gait using crutches and contact assistance.

    c. With a gait belt on a partner, assist in negotiating stairs with crutches.

    d. Adjust an aluminum cane to fit a partner. Have your partner sit in a chair and simulate a patient with one weak leg. Put on a gait belt and assist patient to stand and walk with cane in correct hand. Assist patient to sit down using the cane.

    e. With a gait belt on a partner, assist in going up and down stairs with a cane.

    f. Ambulate partner using gait belt and contact assistance.

4. Practice lowering partner to the floor.

Unit Checklist

Student Name____________________ Overall Unit Rating ______

Activity Sheet: Range of Motion Exercises Rating ______

Comments:____________________

Clinical/Laboratory Activity Sheet: Range of Motion Exercises Rating ______

Comments:____________________

Skill Sheet: Complete Upper Extremity ROM Exercises Rating ______

Skill Sheet: Complete Lower Extremity ROM Exercises Rating ______

Activity Sheet: Ambulation Rating ______

Comments:____________________

Clinical/Laboratory Activity Sheet: Ambulation Rating ______

Comments:____________________

Skill Sheet: Ambulate a Patient with a Partial Weight-bearing Gait Using a Walker and Contact Assistance Rating ______

Skill Sheet: Ambulate a Patient with Three-point, Nonweightbearing Gait Using Crutches and Contact Assistance Rating ______

Skill Sheet: Ambulate a Patient Up and Down Stairs with Crutches Rating ______

Skill Sheet: Ambulate a Patient Using a Cane and Contact Assistance Rating ______

Skill Sheet: Ambulate a Patient Using a Gait Belt Only and Contact Assistance Rating ___

Comments:____

____

____

Written Unit Evaluation Score __________

Additional Comments:____

____

____

Teacher Signature______________________________Date______________

Student Signature______________________________Date______________

Unit VI

Maintaining Treatment Areas

The physical therapist aide plays a major role in cleaning and storing equipment, checking and stocking supplies, and setting up equipment for treatment. Neat, clean, and organized treatment areas are essential to a smoothly operating clinic.

Unit Lesson

Maintaining Treatment Areas

Lesson 1: Maintaining Treatment Areas

Objectives:

A. Check linens and supplies and restock as needed.

B. Follow precautions when using chemicals.

C. Prepare treatment booth.

D. Return equipment to storage area.

E. Perform routine cleaning and maintenance of equipment.

F. Clean and disinfect hydrotherapy equipment.

Key Terms:

- Material Safety Data Sheet (MSDS)
- Debridement

Checking and Stocking Linens and Supplies

Physical therapy clinics vary in size, layout, and patient population. Therefore, the number of linens and supplies to have on hand will differ from one place to another. To determine the procedure for checking inventory, ordering supplies, and restocking linens and supplies, speak with your supervisor and/or read the policy manual. It is wise to keep a two- or three-day supply of linen on hand.

Linens - Sheets, towels, washcloths, and bath blankets are used in all areas of physical therapy. Patient gowns, robes, and shorts may also fall into the linen category, depending on the facility. Some facilities use disposable "linens" because they may be less expensive than those that must be laundered.

The linen supply may be centralized and accessible to all parts of the clinic. In a large facility, each area (gym, treatment booth, and hydrotherapy area) will have its own supply.

Supplies - Disposable supplies such as gloves, paper cups, tissues, paper towels, emesis basins (a moon-shaped pan with multiple uses), paper gowns, and paper slippers need to be replenished when supplies are low. Ultrasound lotion, electrode gel, electrodes, alcohol wipes, powder, mineral oil, tape, elastic bandages, and other materials for dressing wounds are usually kept near the treatment booth area or in hydrotherapy.

These disposable supplies need to be counted at the storage site to ensure they are replaced before the clinic runs out of them. The number to keep in reserve can be determined by estimating and recording how much of an item is used on a daily or weekly basis. A one- to two-month supply of disposable items can usually be stored in a cabinet or storeroom.

Observing Precautions when Using Chemicals

Either alcohol or special cleaning agents may be used to clean surfaces in the physical therapy department. In order to protect the users of potentially hazardous chemicals, the federal government, through the Occupational Safety and Health Administration (OSHA), requires the product manufacturer to supply the buyer with a **Material Safety Data Sheet**

Figure 1.1 - Mock MSDS

Material Safety Data Sheet
Any Chemical Company • 500 Anywhere • USA 00000-0000
"The information herein is given in good faith, but no warranty, expressed or implied, is made"

Emergency Telephone No.: 1-800-000-0000
Date Prepared: April, 1996

SECTION I

Chemical Name and Synonyms: Providone Iodine Solution USP, PVP-I

Trade Name: Iodine Solution (10% Providone Iodine = 1% Available Iodine)

Chemical Family: Polymer, complex of Polyvinylpyrrolidone with iodine

Formula: (C_6H_9NO) n x I

CAS Registry No.: 0000.00

SECTION II: INGREDIENTS

Name	Percent (%)	TLV	Toxicological Data
Providone Iodine USP	10.00	•	Mouse, Oral LD_{50}>8100mg/kg Rat, IV LD_{50}>540mg/kg
Glycerin	1.25		
Igepal	.30		
Purified Water	88.45		

No component is listed by NTP or IARC •Not Established as having Carcinogenic Potential

SECTION III: PHYSICAL DATA

Specific Gravity: (25°C.) 1.025 **pH:** <6.0

Appearance & Odor: Reddish brown, clear liquid, faint odor

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flashing Point (method used): Not flammable **Flammable Limits:** None

LEL: n/a **UEL:** n/a

Extinguishing Media: n/a

Special Fire Fighting Procedures: n/a **Unusual Fire & Explosion Hazards:** None

SECTION V: HEALTH HAZARD DATA

Threshold Limit Value: None established by OSHA or ACGIH

Effect of Overexposure: This product is generally recognized as safe when used as a logical antimicrobial agent. Prolonged exposure to wet solution may cause local irritation to the skin. Elevated concentrations of iodide in the serum may occur if excessive amounts of iodine are absorbed through broken skin, burns, or deep wounds. Iodine may also be absorbed through the lungs and from the gastrointestinal tract. High concentrations of iodide in the serum may produce alterations in thyroid, renal disturbances, acidosis and electrolyte disturbances.

Emergency and First Aide Procedures:

For Eyes: Immediately wash with running water for 5 minutes. Get medical attention if irritation persists

For Skin: Avoid prolonged contact with excess wet solution. If irritation develops, get medical attention.

For Ingestion: If swallowed, DO NOT INDUCE VOMITING. Drink several glasses of water or milk. Obtain immediate medical attention.

For Inhalation: If fumes cause respiratory discomfort, move to fresh air. Get medical attention if respiratory discomfort persists.

SECTION VI: REACTIVITY DATA

Stability: Stable **Storage:** Store at room temperature.

Incompatibility: Not stable toward reducing agents or strong alkalies.

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Conditions to Avoid: None **Corrosive to Metal:** Yes

Type: Iron; can discolor gold or silver **Oxidizer:** Yes

SECTION VII: ENVIRONMENTAL DATA

Steps to be Taken in Case Material is Released or Spilled: Spills should be cleaned up as soon as possible; wash affected area with dilute ammonia or dilute sodium thiosulfate solution and copious quantities of water.

Waste Disposal Method: Do not discharge more than minute quantities into waterways or sewer systems. Neutralize with sodium thiosulfate prior to disposal.

Hazardous Substance Under "Superfund": No **Hazardous Waste, 40 CFR 261:** No

Hazardous Waste Number: n/a

Container Disposal: In a similar manner as other plastic bottles.

SECTION VIII: SPECIAL PROTECTION

Respiratory Protection (Specify type): n/a **Protective Gloves:** n/a

Ventilation: Local Exhaust: n/a **Special:** n/a

Mechanical (General): n/a **Other:** n/a

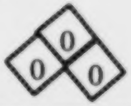
Eye Protection: n/a **Other Protection Equipment:** n/a

SECTION IX: SPECIAL PRECAUTIONS

Precautions to be taken in Handling and Storage: n/a **Other Precautions:** n/a

National Fire Protection Association (NFPA)

Rating Degrees of Hazard:



BEST COPY AVAILABLE

(MSDS). The MSDS is a document that covers in detail (1) what a product is made of, (2) what physical harm it can cause, (3) precautions to take to prevent injury, (4) what steps to take in case of an accident, and (5) who to call in case of questions or an accident. The MSDS must be posted in the place where the chemical will be used. Anyone who will be using the product should read and follow the recommendations on the MSDS. (Figure 1.1 is a mock MSDS.) Rubber gloves are recommended when using most cleaning products. Avoid splashing or spraying cleaning chemicals in your eyes and breathing fumes or mist from aerosol dispensers.

Preparing Treatment Booths

A big responsibility of the aide is preparing treatment booths, so it pays to become very efficient. Treatment tables may have an attached or unattached mat. On a table with an attached mat, a sheet is placed over the table without being tucked in at the sides and ends. It will fall loosely, much like a tablecloth. For treatment tables with an unattached mat, the sheet can be secured with mitered corners much like a hospital bed. One or two pillows are routinely kept in each treatment booth.

If the nonabsorbent pillow cover or mat is soiled, it should be cleaned with an approved cleaning solution. Check with your supervisor or department policy manual to determine the type of solution.

Steps of Procedure for Preparing Treatment Booths:

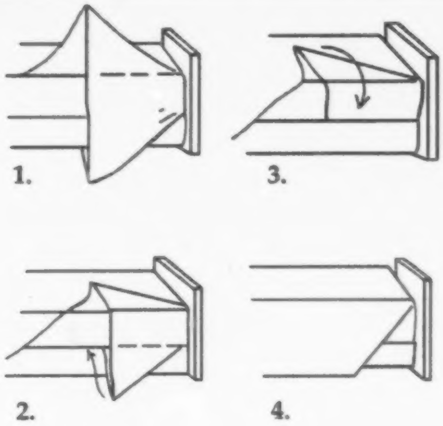
1. Wash your hands. Put on gloves.
2. Obtain linens and supplies.
3. For hospital beds and adjustable tables, raise bed to high position. Lower bed rails. Lower bed to flat position.
4. Remove pillow and strip pillowcase. Place pillowcase on top of sheet. Do NOT allow linens to come into contact with your uniform.
5. Wash and dry nonabsorbent inner cover of pillow if soiled.
6. Place pillow on storage rack.
7. Strip mat by rolling linens toward center. Do NOT allow linens to come into contact with your uniform.
8. Place dirty linens in laundry. If disposable linens were used, dispose in appropriate container.
9. Wash and dry mat if soiled.
10. If used supplies are lying in the treatment booth, pick them up and dispose of them properly.
11. Remove gloves and dispose in appropriate container.
12. Wash hands.
13. Unfold sheet on mat, full length.
14. Attached Mat: Center sheet over treatment table. Let edges fall loosely.

    Unattached Mat:
    a. Center sheet over treatment table.

    b. Tuck in sheet at head of table; miter near corner (Figure 1.2).

    c. Tuck in sheet at foot of table; miter near corner.

Figure 1.2 - Mitered Corner



   d. Tuck in near edge of sheet.

   e. Go to other side of table. Miter lower corner.

   f. Miter upper corner.

   g. Tuck in side.

15. Put pillowcase on pillow (Figure 1.3):

   a. Grasp closed end of pillowcase.

   b. Put your other hand through the opening as if turning the case wrong side out. Turn the pillowcase over your hand that is holding the closed end.

   c. Grasp the pillow in the covered hand.

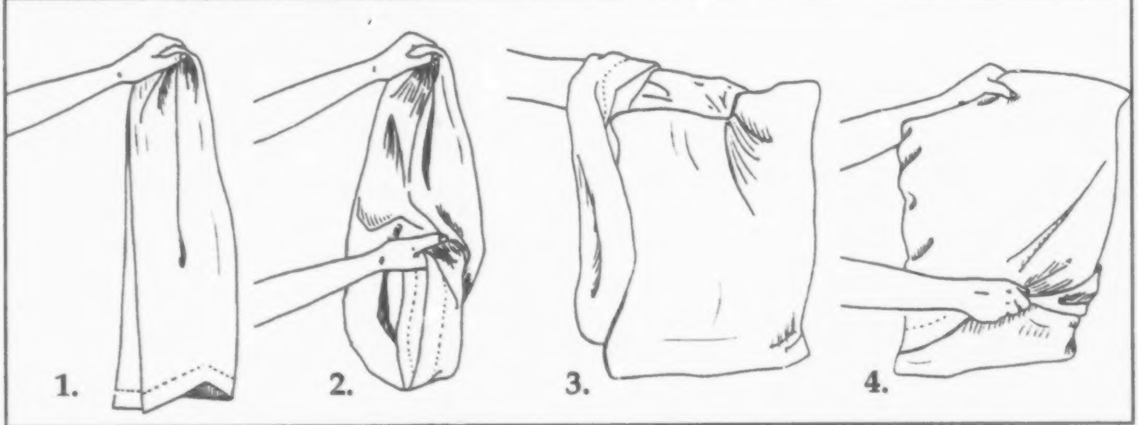
   d. Using your other hand, work the pillowcase over the pillow.

16. Place the pillow at the head of the mat.

17. Make sure timer and tap button are on shelf in treatment booth.

18. Check supplies and restock as needed.

Figure 1.3 - Putting on a Pillowcase



Storage of Equipment

Small pieces of equipment are easily moved and must be placed back in their storage place after use, so they are out of the way but easily located when needed. Barbells, cuff weights, and sandbags are usually stored on racks. There should be a specified place for gait belts, tape measures, and other commonly used small items. In addition to being cleaned regularly, these small items should be counted and inspected on a regular basis. They will need to be replaced if worn out or lost.

Sometimes equipment that will become the property of the patient is stored in the physical therapy clinic. For example, when a patient is finished gait training for the day, unless the patient takes the equipment out of the clinic, the crutches or walker should be stored. Equipment the patient is purchasing should be labeled with the patient's name and room number or home address.

Routine Cleaning and Maintenance of Equipment

On a regular basis, all hard-surfaced equipment must be dusted, wiped with disinfectant, or polished. Your supervisor will indicate the type of cleaner to be used.

Daily cleaning applies particularly to equipment with which patients come into contact: mats, treatment tables, parallel bars, cycle handlebars, cycle seats, treadmill bars, tilt table, pulley weights, equipment seats, armrests and footrests, and handles.

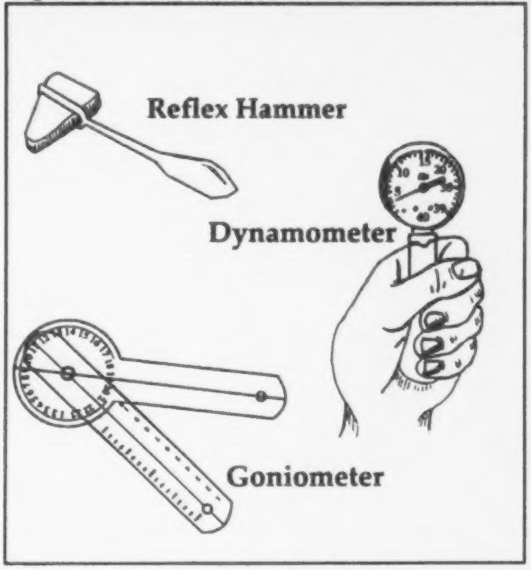
Pillows should have nonabsorbent inner covers under the pillowcases. These should be wiped with alcohol or cleaning solution weekly or as needed if they become soiled. Weekly cleaning also applies to stainless steel equipment (hot pack, cold pack, and paraffin bath, for example). These devices should be wiped with disinfectant, allowed to dry, and then lightly wiped with stainless steel polish. The aide should always wear disposable rubber gloves when using these cleaning and polishing agents. Refer to the MSDS for specific information about the cleaning agents being used.

Much of the equipment in a physical therapy gymnasium is large and heavy and remains in one place, such as the exercise mats, treadmill, and exercise bicycles. Parallel bars are usually fastened to the floor; stall bars and wall pulleys are attached to the wall and therefore cannot be moved. Equipment such as a hot pack or cold pack machine can be moved for cleaning, but generally stays in one place. Certain other pieces of equipment are on casters and can be wheeled from place to place, but need to be returned to their assigned places so they can be located quickly. Examples of this type of equipment include ultrasound, electrical stimulation devices, and even the "crash cart" containing supplies for patient emergencies.

Tools used for evaluating patients should also be cleaned and carefully stored where they will be safe but easily accessible. These tools include tape measures, reflex hammers, and gauges. Dynamometers, which measure hand strength, and goniometers, which measure joint range of motion, are two types of gauges (Figure 1.4). Sphygmomanometers (blood pressure equipment) and stethoscopes should be cleaned and stored, although sometimes therapists prefer to use and maintain their own personal equipment.

The hot pack machine, cold pack machine, and paraffin bath each have specific requirements for maintenance, and the best source of information about a

Figure 1.4 - Patient Evaluation Tools



particular unit is its service manual. Figure 1.5 is an example schedule for routine maintenance.

When the water level of the hot pack machine gets low from evaporation, water will need to be added. The hot pack machine also needs to be drained and refilled regularly. The cold pack machine must be defrosted when ice builds up. A little build-up is not a problem, but the machine must be defrosted before the ice interferes with removal and replacement of the ice packs. Both the hot packs and cold packs must be replaced if the covers are worn or the contents leak.

The paraffin bath should be drained and cleaned regularly, and old paraffin should be filtered or new paraffin and oil added to the unit. Whether the paraffin-oil mixture is reused or discarded after each patient depends on the procedure preferred in the facility. Paper towels or clean terry cloth towels can be used to wipe down equipment.

Cleaning and Disinfecting Hydrotherapy Equipment

An extremely important responsibility of the physical therapist aide is cleaning the hydrotherapy equipment. Bacteria and viruses from one patient must not be passed to the next patient because the whirlpool or tank was inadequately cleaned. To reduce the number of organisms on tank surfaces, it is important to clean with hot water, disinfectant, and a brush. After cleaning, allow surfaces to dry completely to help kill organisms.

Hydrotherapy Supplies

Although some of the supplies used in hydrotherapy are the same as in other parts of the clinic, there are specialized items required for patients who have open wounds. These patients often require **debridement**, the removal of dead tissue. Sterile linens are needed to cover large wounds when the patient emerges from the whirlpool, and sterile dressings may need to

Figure 1.5 - Example of a Routine Maintenance Schedule

Equipment	Type Maintenance	Frequency
Hot pack machine	Replace evaporated water	As needed (check daily)
	Drain, clean, and refill	Weekly
Cold pack machine	Defrost machine	As needed (check weekly or monthly)
Paraffin bath	Add new paraffin	As needed (check daily)
	Drain, clean, and refill	Weekly

be applied to the injured area. Isolation gowns, caps, face masks, and sterile gloves are sometimes required when patients with large open wounds, such as a burn, receive hydrotherapy.

The following is a list of supplies and materials that are usually stored in cabinets or on shelves in the hydrotherapy area. These items need to be counted regularly.

- Linens (towels, washcloths, sheets, flannel bath blankets, and patient garments)
- Sterile linens (packaged and dated)
- Sterile debridement kits and gloves
- Wound dressings and bandaging supplies
- Isolation gowns, face masks, surgical caps
- Rubber gloves
- Whirlpool additives
- Cleaning agents

Observing Precautions When Using Hydrotherapy Chemicals

Whirlpool additives and cleaning agents are two classes of chemical agents used in the hydrotherapy area that can present hazards to the caregiver and patients. Whirlpool additives are agents that are added to the water to control bacteria or reduce foaming. They are packaged in a highly concentrated form before they are diluted by the water. Cleaning agents, particularly those that have a bacteriostatic (stops the growth of bacteria) or bacteriocidal (kills bacteria) effect, must be handled carefully in their concentrated forms. Avoid splashing these agents onto your skin or into your eyes.

The aide should always be absolutely sure which whirlpool additive, if any, is to be used with each individual patient. Some patients are allergic to certain additives and some additives can slow the rate of healing in patients who have open wounds. If you notice that the patient has a rash or skin irritation, notify the therapist or assistant before placing the patient in the whirlpool.

To decrease the possibility of skin irritation from the cleaning agents, rinse the whirlpool completely before disinfecting and drying it.

The MSDS for each agent used in hydrotherapy must be posted and observed. The aide should wear disposable rubber gloves when adding agents to the water. When cleaning the tank, use sturdy disposable gloves or elbow-length reusable rubber/vinyl gloves. Aides should develop a habit of wearing goggles when cleaning whirlpools.

Steps of Procedure for Cleaning a Whirlpool or Full Body Tank:

1. Gather cleaning equipment and supplies.

2. Put on sturdy disposable gloves or reusable vinyl/rubber gloves.

3. Drain water from the tank; any equipment used in the tank should be left in it, or returned to it, for cleaning (for example, a stretcher used to lower a person into a tank).

4. Scrub the inside of the tank, the agitator, and other equipment with disinfectant and a brush.

5. Refill the tank with hot water (at least 115°F) from the tap.

6. Add disinfectant as directed for the size of the tank.

7. Turn on the agitator and scrub the inside walls of the tank, the agitator,

and any other equipment with a long-handled brush for five minutes.

8. Turn off the agitator and scrub the inside of the intake tubes.
9. Drain and refill with hot water from the tap; let stand at least five minutes.
10. Rinse all parts of the tank and equipment that are above the water line using the long-handled brush.
11. Drain the tank and remove equipment.
12. Go over all surfaces of the tank and inside the agitator tubes with disinfectant on a sponge.
13. Wipe the outside surfaces of the tank.
14. Let the tank dry.
15. Fill the tank for the next patient, if appropriate.
16. Return equipment and supplies to appropriate area. Properly dispose of used supplies.
17. Wash hands.

Unlike a whirlpool, a therapeutic pool is not drained between patients. Additives are used to halt the growth of organisms. Patients with open wounds or who are incontinent (unable to control bladder or bowel movements) cannot use the therapeutic pool. The pool must be drained and cleaned regularly, according to department procedures.

The infection control staff regularly tests hydrotherapy equipment to be sure it is being properly sanitized.

Storing Hydrotherapy Equipment and Supplies

Equipment used in the hydrotherapy area should be returned to storage when not in use. Cleaning agents and equipment should be stored in one cabinet. Whirlpool additives that will contact the patient's skin should be stored in a storage cabinet or area separate from the cleaning agents. This is necessary to avoid accidentally exposing patients to cleaning agents.

There should be several sets of gloves and brushes used to clean the whirlpools. Brushes and reusable elbow-length rubber gloves should be air-dried between cleaning jobs and not stored until thoroughly dry.

Test Your Knowledge: Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied.

After you have completed the activity sheets, you may take the written unit evaluation. A score of at least 80 percent indicates you may proceed to the next unit. Check with your clinical supervisor for skill testing.

Lesson 1: Maintaining Treatment Areas

Activity Sheet

1. List three small tools used for evaluating patients that need to be cleaned and carefully stored after use.

   a. ______________________________

   b. ______________________________

   c. ______________________________

2. When is a mitered corner used to secure the sheet on a treatment table?

   ____

3. List three examples of disposable supplies that need to be replaced on a regular basis.

   a. ______________________________

   b. ______________________________

   c. ______________________________

4. List two reasons why is it important to put equipment back in the proper storage places.

   a. ______________________________

   b. ______________________________

5. If you were a patient and saw that the equipment in the physical therapy clinic was dusty, dirty with fingerprints, and in disarray, what would you think about the care you would receive?

   ____

   ____

6. How many days' supply of linen should be available in the physical therapy clinic?

   ____

7. How should you find out the specific requirements for maintaining the hot pack machine, the cold pack machine, and the paraffin bath?

8. List two reasons why whirlpool additives are added to the water in the whirlpool.

   a. ______________________________

   b. ______________________________

9. What do the infection control staff of medical facilities do on a regular basis to be sure hydrotherapy equipment is being properly sanitized?

10. Why is it important for an aide to thoroughly clean a whirlpool or tank?

11. What is one way to avoid accidentally exposing patients to whirlpool cleaning agents?

12. What information is included on an MSDS?

    a. ______________________________

    b. ______________________________

    c. ______________________________

    d. ______________________________

    e. ______________________________

13. Why is it important to clean whirlpool tank surfaces with hot water, disinfectants, and a brush and to allow the surfaces to dry?

Lesson 1: Maintaining Treatment Areas

Clinical/Laboratory Activity Sheet

1. Count and arrange sandbags by size on their shelves or hooks. Identify sandbags that should be replaced because they are leaking or dirty.

2. Wipe plastic covers of Velcro™ cuff weights with a damp towel and arrange weights by size (which are usually different colors) on the rack.

3. Put on disposable gloves and wipe down an exercise mat and parallel bars with alcohol or spray cleaner and a towel as directed by clinic policy.

4. Write a brief summary on the system your clinical site uses to keep track of equipment that is sold, loaned, or given to patients. Turn in your summary to your clinical supervisor and discuss any questions or concerns.

   ____

   ____

   ____

   ____

   ____

   ____

5. Practice putting sheets on the mat of a treatment table using mitered corners. Have your clinical supervisor or classroom instructor inspect your work.

6. Practice putting pillowcases on pillows using the method illustrated in this lesson.

7. Describe how linens are managed at your clinical site. Is there a central linen storage area in the clinic or does each area have a central storage place?

   ____

   ____

8. Where are dirty/soiled linens placed?______________________________

9. Where are contaminated linens put? Are they handled differently than dirty/soiled linens?

10. Clean your sink at home. Use a sponge and old toothbrush to clean the cracks. When you are finished, use a Q-Tip™ or a white cloth around the tip of an old knife to go around the edges to find any inadequacies in your cleaning system.

11. With permission of your clinical supervisor, clean a hydrotherapy tank in the physical therapy department. Have your supervisor inspect your work to make sure your procedure is correct.

12. At your clinical site, locate the MSDS for each cleaning solution used in the physical therapy department. Read them carefully.

13. After your clinical supervisor demonstrates these procedures, you should practice them.

    a. Prepare treatment booth
    b. Perform routine cleaning and maintenance of equipment
    c. Clean and disinfect hydrotherapy equipment

Unit Checklist

Student Name ________________________________ Overall Unit Rating __________

Activity Sheet: Maintaining Treatment Areas Rating __________

Comments: ____

____

____

Clinical/Laboratory Activity: Maintaining Treatment Areas Rating __________

Comments: ____

____

____

Skill Sheet: Prepare Treatment Booth Rating __________

Skill Sheet: Clean a Whirlpool or Full Body Tank Rating __________

Written Unit Evaluation Score __________

Additional Comments: ____

____

____

Teacher Signature ________________________ Date ________________

Student Signature ________________________ Date ________________

Unit VII

Office Communication

The physical therapist aide often meets and greets patients and their families and friends and occasionally answers the telephone in the department. The aide also communicates regularly with other health care team members both within and outside of physical therapy.

You will want to present yourself, as well as the physical therapy department, in the most gracious and professional manner. Unit VII provides information about carrying out these communication tasks effectively.

Unit Lesson

Office Communication

Lesson 1: Office Communication

Objectives:

A. Identify effective telephone techniques.

B. Fill out a message slip.

C. Greet patients and visitors.

D. Communicate with health care team members.

Effective Telephone Techniques

If the physical therapist aide is called upon to answer the telephone in the physical therapy office, it is important to be pleasant at all times. The aide should identify the clinic and give his or her own name. A concise way of answering the telephone would be to clearly and pleasantly say, "Physical therapy, this is Jane Smith."

Speak clearly and listen carefully to what the caller has to say. Do not put a caller on hold unless it is absolutely necessary. If you must do so, inform the caller that you are putting him or her on hold and about how long it will be before you return. For example, "Mr. Jones, would you please hold for about two minutes while I check with the physical therapist?" Do not place a caller on hold until he or she agrees to wait.

A caller should not have to wait longer than two minutes before the person being called comes to the phone. If the wait is going to be longer than two minutes, explain the situation to the caller and see what he or she would like to do. The caller may decide to wait a few minutes longer, call back later, or leave a message.

Make certain that you do not leave a caller on hold longer than the length of time you mentioned. If the physical therapist is busy and you cannot speak with him or her within two minutes, take your caller off hold and explain the situation. It may be necessary to return the call later, but you can give the caller a choice: "Thank you for waiting, Mr. Jones. The physical therapist is with a patient right now. Would you like to hold for five minutes longer, or may the physical therapist call you back before 2:00 p.m.?"

If the individual on the telephone is rude or demanding, it is best to remain polite. The caller may calm down so that information can be exchanged. If the telephone caller becomes verbally abusive, remain calm and ask him or her to call back at a later time. Inform your supervisor of the situation so he or she can be prepared for the return call. Do not be argumentative with clients. They may have stress due to circumstances of which you are unaware. Try not to let lack of courtesy and tact on the part of a patient affect you adversely.

When you take a caller off hold, thank him or her for waiting. If the caller expects a return call from you or another staff member, indicate the latest time the call will be returned. If you cannot guarantee the caller a return call, do not mention it. For example, if a salesperson wants to speak with the therapist personally, the therapist may not feel obligated to return the call. In such a case, you may say "Thank you for waiting, Mrs. Smith. The physical therapist is with a patient at this time. Would you like to call again later?"

Use good grammar and avoid slang for business calls in the clinical setting. Poor English gives the caller a poor first impression of the facility. Compare the following two statements: "We ain't got you down for no appointment today, Mr. Green" and "Our appointment book doesn't show an appointment for you today, Mr. Green."

If the caller wants to make an appointment, a person who is knowledgeable about the schedule should be the one to make the appointment. The physical therapist aide can make appointments if the supervisor has given him or her special training. Otherwise, a telephone number should be taken so that the receptionist can call the person back to make the appointment.

If the caller asks about a patient, the aide can say whether or not the patient is in the department, but other information about the patient *should not* be provided by the physical therapist aide. Calls regarding patients must be referred to the patient's physical therapist, the patient's physical therapist assistant, or the person who is in charge of scheduling.

Filling Out a Message Slip

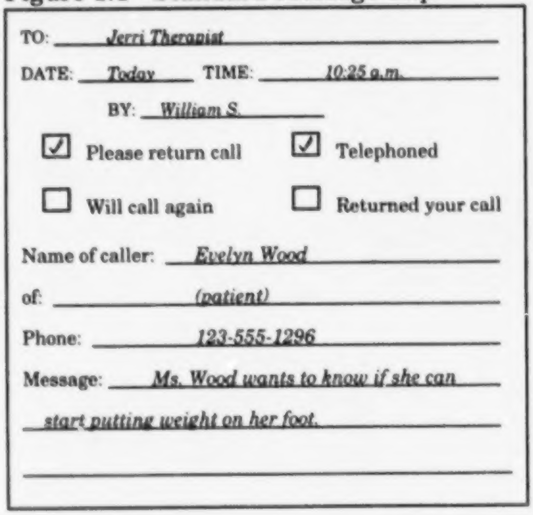
If the person called is not available, fill out a message slip. The standard message slip (Figure 1.1) is better than using a piece of paper, because the message slip contains reminders about all of the information that should be obtained from the caller. Make sure you write clearly so that the message can be easily read.

Place the completed message form where the individual called will be sure to see it. There should be a specific place where messages are passed to the physical therapy staff members so they will not be misplaced or lost.

A complete message should contain the following:

- Name of the person who is to receive the message
- Date and time of the call
- Name of the person who took the call (your name)
- Appropriate box or boxes checked that explain what the caller plans to do or wants the message receiver to do
- Name of the caller - If you do not recognize the name, ask the caller to spell it.
- Caller's position, department in the hospital, or other information that will help identify the person calling
- Caller's telephone number, including the area code - Repeat the number back to the caller as you write it down; getting numbers switched or wrong can make it impossible to return an important call.
- Caller's brief message, if any

Figure 1.1 - Standard Message Slip



TO: *Jerri Therapist*

DATE: *Today* TIME: *10:25 a.m.*

BY: *William S.*

☑ Please return call ☑ Telephoned

☐ Will call again ☐ Returned your call

Name of caller: *Evelyn Wood*

of: *(patient)*

Phone: *123-555-1296*

Message: *Ms. Wood wants to know if she can start putting weight on her foot.*

Greeting Patients and Visitors in the Physical Therapy Office

Every department has a procedure on how to greet patients, visitors, and other health care professionals. Always follow the procedure for your department. Everyone who comes to the physical therapy office needs to be greeted with a smile and a kind word. Someone on the staff should acknowledge anyone who comes into the office or department and find out if the person needs assistance. If you know the person, you might greet him or her by name. If you do not know the person, an appropriate greeting might be "Hello, how may I help you?"

If the person is a patient scheduled for an appointment, the office receptionist or secretary will usually notify the patient's therapist. It may be the physical therapist aide's responsibility to tell the therapist the patient has arrived and to inform the patient how long it will be until the therapist is ready for him or her. The aide should then let the patient know how long it will be and ask if there is anything the patient needs. For example, getting a stool to elevate a patient's painful foot would be thoughtful and helpful.

A visitor without an appointment should be asked to be seated while the aide notifies the office secretary or a physical therapist. Depending on the visitor's needs, the secretary or a member of the professional staff may be able to see the visitor or help the visitor leave a written message. A new patient may need to be directed to the secretary to make an appointment.

It is not unusual for former patients to drop by to see the staff and show them how they are getting along. The individual may want to demonstrate how well he or she is walking or wish to give a message to a particular member of the staff. Some patients bring gifts. Personal gifts are discouraged, if not prohibited, by most facilities. However, things that can be shared in the clinic (e.g., a box of candy) are usually acceptable.

Communicating with Health Care Team Members

Teamwork implies working closely together. It is very important to keep the lines of communication between members of the team open and based on mutual respect. The philosophy of physical therapy is to help people achieve their best. The same positive approach that works for patients can work for the staff as well. A degree of understanding is needed for many patients, and that same quality helps smooth out interactions of the staff.

Work in physical therapy can be physically demanding, as well as mentally and emotionally challenging. These demands should relate only to patient care and not to the ability of the staff to get along with each other.

When problems between people arise, they can be worked out if the individuals involved approach the situation in a reasonable, mature, and polite manner. An apology can do much to improve the situation and allow everyone to get on with the important work that needs to be done.

Test Your Knowledge. Complete the following activity sheet and clinical/laboratory activity sheet to test your knowledge and understanding of the materials you have studied in this lesson.

After you have completed the activity sheets, you may take the written unit evaluation. A score of at least 80 percent indicates you have completed the material. Review all units, paying particular attention to the items you missed.

Lesson 1: Office Communication

Activity Sheet

1. Fill out the following message slips using the information provided in the scenarios. Answer questions where indicated.

   Scenario Number One:
   Dr. Brady from Community Hospital has just called to ask physical therapist, Mary Sanders, about Mr. Allen, a stroke patient. He wants the therapist to page him by telephone at 123-555-5432 this afternoon to discuss discharge plans for Mr. Allen.

   Scenario Number Two:
   Mrs. Grimes called at noon while you were eating lunch to say her headache was worse and she was canceling her appointment this afternoon. She did not want her physical therapist, Jenny Black, to call back, and she did not want to wait on the telephone for you to get her. She refused to leave her telephone number saying, "If you can't find it, it's your problem." She then hung up.

   a. How would you feel about this patient? ____________________

   b. How should you speak to her on the telephone? ____________________

   c. How will you act toward her when you see her the next time? ____________________

   d. Would you give Jenny Black, PT, the message in person? ____________________

Scenario One

TO: ____________________
DATE: ____________ TIME: ________
BY: ____________
☐ Please return call ☐ Telephoned
☐ Will call again ☐ Returned your call
Name of caller: ____________________
of: ____________________
Phone: ____________________
Message: ____________________
____
____
____

Scenario Two

TO: ____________________
DATE: ____________ TIME: ________
BY: ____________
☐ Please return call ☐ Telephoned
☐ Will call again ☐ Returned your call
Name of caller: ____________________
of: ____________________
Phone: ____________________
Message: ____________________
____
____
____

2. What might be an appropriate greeting for you to use when answering the phone in the physical therapy clinic?

3. Describe what you would do and say to put a caller on hold?

4. Why is it important to repeat the caller's telephone number?

5. Why is it important to use proper grammar when answering the phone?

6. What might be an appropriate greeting to patients or visitors to the physical therapy clinic?

7. The lines of communication between members of the health care team are based on mutual respect. What do you think this means? Give examples that support your statement.

Lesson 1: Office Communication

Clinical/Laboratory Activity Sheet

1. Go to the office of your clinical site. If there is a receptionist, ask him or her to give you a briefing on office policies. Ask about the standard procedure for taking messages and the normal telephone protocol (what is said when answering the phone). Write a summary of your findings and discuss them with other physical therapist aide students and your classroom instructor.

    ____

    ____

    ____

    ____

2. Write a list of words that you find annoying in a conversation (especially on the telephone), such as: yeah, huh, done, so, got it. Compare lists with your classmates. Also make a list of words and phrases you find offensive, demeaning, and unfair. Share this list with your classmates and instructor. After discussion of why you don't like these words and phrases make a combined list and post it near the phone. Add a title like "Don't Use This Language" or "Offensive Phrases."

    ____________________ ____________________

    ____________________ ____________________

    ____________________ ____________________

    ____________________ ____________________

    ____________________ ____________________

3. Write out scenarios for different situations that might involve telephone conversations in the physical therapy department. With a physical therapist aide classmate or other health related occupations student, practice receiving these calls and taking the message. Use some of the situations discussed in this chapter, e.g., belligerent patient, stressed out patient. Use your own ideas about the type of confusing calls that might be received. Discuss your scenarios with your site supervisor (and office receptionist if appropriate) to learn how they have reacted in similar situations. (Use the back of this sheet if needed.)

Unit Checklist

Student Name____________________________________ Overall Unit Rating ______

Activity Sheet: Office Communication Rating ______

Comments:____

Clinical/Laboratory Activity Sheet: Office Communication Rating ______

Comments:____

Written Unit Evaluation Score ______

Additional Comments:____

Teacher Signature__________________________________Date________________

Student Signature__________________________________Date________________

Written Unit Evaluation

Circle the letter that corresponds to the best answer.

1. What were the two major events behind the development of physical therapy in the United States?

    a. World War I and the polio epidemic
    b. World War I and the influenza epidemic
    c. Korean and Vietnam Wars and the AIDS epidemic
    d. World War II and the AIDS epidemic

2. Who is the person given credit for starting physical therapy in the United States?

    a. Franklin Roosevelt
    b. Mary McMillan
    c. Clara Barton
    d. Susan B. Anthony

3. What professional organization currently represents physical therapists in the United States?

    a. Women's Physical Therapeutic Association
    b. World Confederation for Physical Therapy
    c. American Physiotherapy Association
    d. American Physical Therapy Association

4. Which of the following is a common workplace setting for physical therapy?

    a. City hall
    b. High school
    c. Long-term care facility
    d. Municipal building

5. What is the educational requirement for a physical therapist aide?

    a. 2 years college
    b. 4 years college
    c. High school diploma
    d. Completed 10th grade

6. What are the educational requirements for a physical therapist?

   a. 2 years college
   b. 4-6 years college
   c. High school diploma
   d. Completed 10th grade

7. Who is at the "center" of the rehabilitation team?

   a. Physician
   b. Physical therapist
   c. Patient and family
   d. Administrator of the facility

8. Which type of patient is most likely to be seen in physical therapy?

   a. A patient with appendicitis
   b. A patient with a total hip replacement
   c. An emergency patient with superficial cuts
   d. A person recovering from pneumonia

9. What age group is most likely to come to physical therapy for total joint replacement treatment?

   a. Children
   b. Teenagers and young adults
   c. Middle-aged adults
   d. Elderly

10. What age group is most likely to come to physical therapy for treatment of cerebral palsy?

    a. Children
    b. Teenagers and young adults
    c. Middle-aged adults
    d. Elderly

11. Who is legally responsible for the patient's physical therapy care plan?

    a. Physical therapist aide
    b. Physical therapist assistant
    c. Physical therapist
    d. Patient

12. Which of the following hospital personnel normally has little direct contact with the patient?

    a. Doctors
    b. Nurses
    c. Medical records clerks
    d. Physical therapist aides

13. Who usually coordinates the total care plan for the patient?

    a. Physician
    b. Nurse
    c. Physical therapist
    d. Radiologist

14. Who is usually responsible for restocking supplies and generally keeps the department in order?

    a. Physical therapist aide
    b. Physical therapist assistant
    c. Physical therapist
    d. Patient

15. Which of the following is not normally a part of the rehabilitation team?

    a. Occupational therapist
    b. Nurse
    c. Dentist
    d. Psychologists

Written Unit Evaluation

Circle the letter that corresponds to the best answer.

1. Which of the following demonstrates empathy to a patient?

   a. Feeling sorry for the patient and weeping
   b. Trying to cheer the patient by telling jokes
   c. Attempting to understand what the patient is going through
   d. Demonstrating that you are just as depressed as the patient

2. What is the main goal of physical therapy?

   a. To help patients regain the maximum amount of ability to do things for themselves
   b. To only treat patients who will be able to do what they could do before their injury
   c. To help all physical therapy patients walk again
   d. To teach patients how to use wheelchairs and crutches

3. A patient in the physical therapy department asks you what is the matter with another patient across the room. If you tell one patient what is wrong with another patient, you are:

   a. Behaving appropriately.
   b. Educating the patient.
   c. Encouraging patient support.
   d. Breaking patient confidentiality.

4. What should you do if a patient is lying on a cart unaware that the hospital gown and sheet have slipped, leaving the patient exposed?

   a. Tell the patient to cover up.
   b. Quietly cover the patient.
   c. Call someone to cover the patient.
   d. Leave the patient uncovered.

5. Sensory deficits may occur in what forms?

   a. Vision loss, hearing loss, or hair loss
   b. Loss of touch, paralysis, or irritability
   c. Decreased taste, heightened awareness, or blindness
   d. Hearing loss, vision loss, or loss of touch

6. **A patient with multiple sclerosis has a loss of touch. What might the aide do to protect the patient from unsafe situations?**

   a. **When walking with the patient, let him or her take your elbow.**
   b. **Do not become involved, so the patient will learn to relieve pressure areas.**
   c. **Check heating pads and hot packs to ensure they will not burn the patient.**
   d. **Encourage the patient to maintain an adequate diet and good nutrition.**

7. When the patient or the patient's family understand the treatments and options so they can make an appropriate decision, this is called:

   a. Informed consent.
   b. A diagnosis.
   c. Empathy.
   d. Confidentiality.

8. What is the ability to imagine what the patient is experiencing?

   a. Sympathy
   b. Pathology
   c. Confidentiality
   d. Empathy

9. What is the label for a patient's medical problem?

   a. Prescription
   b. Diagnosis
   c. Referral
   d. Condition

10. When does a patient have the right to refuse treatment?

    a. Always
    b. Sometimes
    c. Occasionally
    d. Never

11. Taking disposable gloves home for personal use is considered:

    a. Ethical.
    b. Legal.
    c. Illegal.
    d. Unfair.

12. What does optimum function mean?

    a. Maintaining the maximum strength and mobility that is possible for a healthy adult
    b. Resuming the level of functioning a patient had before his or her illness or injury
    c. Making it possible for patients to return to the occupations they pursued before their disabilities occurred
    d. The ability to perform the most that can be expected of an individual

13. What should you do if an alarm sounds on a patient's IV while you are in the physical therapy department?

    a. Plug the device into an electrical outlet and notify the patient's therapist.
    b. Notify the patient's physician immediately.
    c. Place the IV fluid container below the level of the bladder.
    d. Reset the unit's alarm yourself.

14. To avoid urine flow back into a patient's body, the urinary collection bag of a urinary catheter should never be held higher than the patient's:

    a. Waist.
    b. Bladder.
    c. Urethra.
    d. Ureter.

15. How should you assist a patient with one weak arm put on a shirt?

    a. Leave the weak arm outside the robe.
    b. Put the weak arm in the sleeve first.
    c. Put the strong arm in the sleeve first.
    d. Drape the shirt over the patient's shoulders.

16. When placing a gait belt around a patient's waist, the aide must be especially careful of which of the following?

    a. Nasogastric tube
    b. Gastrostomy tube
    c. Nasal cannulae
    d. Oxygen line

17. When handling patients with IVs, which precaution should you take?

    a. Keep the IV fluid container above the level of the patient's heart.
    b. Do not allow an arm with an IV to be raised above the patient's waist.
    c. Remove the IV from the patient to make ambulating easier.
    d. If even a small amount of blood enters the IV line, follow emergency medical procedures.

18. **What is the last step after helping a patient use the bedpan?**

    a. **Flush the waste down the toilet.**
    b. **Document I & O.**
    c. **Remove disposable gloves.**
    d. **Wash your hands.**

19. **What are the signs that the tissues around an IV site are infiltrated?**

    a. **The site dressing is bloody and wet.**
    b. **The tissues appear bruised or lacerated.**
    c. **The IV lines are kinked and the container is empty.**
    d. **The area is swollen and hard to the touch.**

20. **What should the aide do if a patient's colostomy bag is pulled off?**

    a. **Use Body Substance Precautions to reattach the bag and clean the patient.**
    b. **Use Body Substance Precautions to clean the patient and any contaminated surfaces, then notify therapist or nurse.**
    c. **Use Body Substance Precautions to empty the bag, then reattach it to the stoma.**
    d. **Use Body Substance Precautions to reattach the bag, then notify a nurse.**

21. **A child with diabetes is to be brought to the physical therapy clinic in a wheelchair. The child soon begins to cry and call for mother. What can the aide do to gain the child's cooperation?**

    a. **Threaten the child with a spanking, then leave the child alone to sulk and calm down.**
    b. **Promise to take the child out for ice cream later if he or she behaves for treatment.**
    c. **Using a toy, show the child how he or she and the toy are going to physical therapy.**
    d. **Take the child back to his or her room and take the child to therapy tomorrow.**

22. **If wound drainage is seeping through a patient's dressings, what is the aide's appropriate response?**

    a. **Assist the patient using Universal Precautions, then notify the physician that the patient is hemorrhaging.**
    b. **Assist the patient using Sterile Technique, then notify the nursing staff that the drainage tube is dislodged.**
    c. **Assist the patient using Body Substance Precautions, then notify the therapist or assistant.**
    d. **Assist the patient using Body Substance Precautions, then change the dressings on the wound.**

23. Which device carries food to the stomach of a patient?

    a. Intravenous line
    b. Urinary catheter
    c. Nasogastric tube
    d. Oxygen cannula

24. Protecting yourself and others against communicable diseases by treating all moist body substances as if they contain pathogens is called:

    a. Hazardous Substances Rules.
    b. Body Substance Precautions.
    c. Universal Precautions.
    d. Moist Substances Protection.

25. Which component of an IV monitors the flow of liquid?

    a. Drip chamber
    b. Drip valves
    c. Fluid container
    d. Flow catheter

26. What type of shoes should patients wear if they are preparing to walk?

    a. Shoes with slick leather soles
    b. Shoes with gripping plastic soles
    c. Shoes with sliding plastic soles
    d. Shoes with nonskid rubber soles

27. When assisting a patient with one weak arm in removing a shirt before treatment, the aide should:

    a. Remove the sleeve from the weak arm, then the strong arm.
    b. Remove the sleeve from the strong arm, then the weak arm.
    c. Unbutton the garment, then pull it from the neck.
    d. Unbutton the garment, then pull it off as the patient rolls the shoulders.

28. When dressing a patient whose IV is connected to a machine, the best thing for the aide to do is to:

    a. Use a gown with Velcro™ or snap closures on the shoulders, sides, and underarms.
    b. Use a regular hospital gown tying the strings at the neck.
    c. Cut a regular hospital gown apart and pin it at the neck, shoulder, and side.
    d. Drape a sheet toga-style over the patient.

29. **When a patient needs to use a bedpan while he or she is on an exercise mat, what type of bedpan is usually the most comfortable to use?**

    a. **Fracture bedpan**
    b. **Regular bedpan**
    c. **Filter bedpan**
    d. **Rollaway bedpan**

30. When placing a urinal for a patient lying down:

    a. The urinal should NOT be placed at an angle.
    b. The urinal should be propped on the patient's leg.
    c. The flat edge of the urinal should be lying on the bed.
    d. The handle of the urinal should be lying on the bed.

31. I & O are the measurements for:

    a. Fluid intake and output.
    b. Medication intake and urinary output.
    c. Water intake and solid or fluid output.
    d. IV fluid intake and digestive output.

Lesson 3: Assisting the Patient with Comfort and Self-Care

Skill Sheet

ASSIST PATIENT IN CHANGING CLOTHES BEFORE TREATMENT

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Clothing appropriate for treatment

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Arrange necessary clothing.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient from wheelchair to the mat; if he or she is able, have patient sit on side of mat. If unable, help patient to lie down.		
7. Shoes and stockings: a. Loosen shoelaces, pull the tongue of the shoe forward and up.		
b. Support the ankle and slide the foot out of the shoe.		
c. Slide the sock or stocking down to the ankle.		
d. Support the ankle and slide the stocking off the foot.		
e. Place socks/stockings inside shoes. Place shoes out of the way.		
8. Pullover sweater/shirt (sitting only): a. Loosen first (unzip/unbutton), then grasp the bottom of garment at the back and pull on the neck.		
b. Pull over head.		
c. Pull garment off the arms.		
9. Dress/shirt (lying): a. Unfasten garment.		
b. Roll patient to weak side and remove the sleeve from the strong arm.		
c. Tuck the half-removed garment under patient.		
d. Return patient to back; turn him or her slightly in the opposite direction; grasp the garment and pull the sleeve off weak arm.		
Dress/shirt (sitting): a. Unfasten garment.		
b. Remove the sleeve from the strong arm then the weak arm.		

10. Slacks/pants/underpants: a. Unfasten pants at the waist and unzip.		
b. Have patient stand if able and pull pants off legs.		
c. If patient is lying down, have him or her lift hips up and slip pants down over buttocks. If patient is unable to do this, roll patient toward you, slip pants down over hip, then turn to back and to opposite side and pull pants down over other hip.		
d. Return patient to back and slide pants down over legs. Pull pants over feet.		
11. Undershirt/slip is removed following the same steps as for a pullover sweater/shirt.		
12. Brassiere: a. Unfasten bra or assist patient to unfasten bra.		
b. Slip arms out of shoulder straps.		
13. Store clothing and personal belongings (wallet, watch, etc.) appropriately. If garments are soiled, place them in an appropriate container.		
14. Place patient in a comfortable and safe position.		
15. Assist patient in putting on hospital gown to fasten in back (sitting): a. Put patient's weak arm in sleeve first.		
b. Assist in placing strong arm next.		
c. Fasten closure in back.		
Assist in putting on hospital gown (lying): a. Raise weak arm and insert it into sleeve.		
b. Assist with placing strong arm in sleeve.		
c. Tuck gown under the patient's sides.		
d. Roll patient to weak side and fasten the closure in back (if needed).		
16. Wash hands.		
17. Record observations and report anything unusual to the therapist.		

The student has satisfactorily completed the procedure "ASSIST PATIENT IN CHANGING CLOTHES BEFORE TREATMENT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 3: Assisting the Patient with Comfort and Self-Care

Skill Sheet

ASSIST PATIENT IN CHANGING CLOTHES AFTER TREATMENT

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Clothing appropriate for patient

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary clothing.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in removing clothes worn during treatment, if needed.		
7. If patient is on mat, put on underclothes, stockings, slacks, and shoes while lying down.		
8. Brassiere: a. If patient can assist, place around her chest so fasteners are in front; fasten bra.		
b. Shift it around so fasteners are in back.		
c. Instruct patient to slip arms through the shoulder straps.		
9. Undershirt/slip: a. Assist or have patient put arms into the undershirt/slip first.		
b. Assist or have patient put head into the undershirt/slip.		
c. Check and make sure the undershirt/slip does not remain rolled up on the patient's back. Pull down to waist.		
10. Stockings/socks: a. Roll the stocking down from the opening to just beyond the heel.		
b. Support the patient's ankle and slip the rolled stocking over the toes; position it over the heel, and pull it up smoothly over the leg.		

11. Underpants/slacks/pants: a. Put both legs in pants; slide up to hips.		
b. Have patient lift his or her hips and pull pants up. If patient is unable to, turn to one side and slip pants over hip, then turn to opposite side and pull pants over hip.		
c. Zip the zipper and fasten the snap or button (if applicable).		
d. If patient has a catheter, leave the fly open to allow for tubing, then pin the fly shut.		
12. Shoes: a. Always help patient put shoes on before standing up from the mat to avoid slipping on the floor.		
b. Loosen laces and pull the tongue of the shoe forward and up.		
c. Support the patient's ankle as you slide the toes, foot, and heel into the shoe. Use a shoe spoon if necessary.		
d. If possible, have patient tie shoelaces.		
13. Assist patient into a sitting position on side of mat or to a chair.		
14. Dress/shirt: a. Assist or have patient put weak arm in sleeve of garment first.		
b. Put other arm in next.		
c. If both arms are weak, put dress on over feet, then put arms in sleeves.		
15. Pullover sweater/shirt is put on following the same steps as for an undershirt/slip.		
16. Place soiled garments in appropriate container.		
17. Wash hands.		
18. Record observations and report anything unusual to the therapist.		

The student has satisfactorily completed the procedure "ASSIST PATIENT IN CHANGING CLOTHES AFTER TREATMENT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 3: Assisting the Patient with Comfort and Self-Care

Skill Sheet

ASSIST PATIENT IN USING BEDPAN ON MAT

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Regular bedpan or fracture bedpan
2. Sheet
3. Powder
4. Gloves
5. Toilet paper
6. 2 washclothes
7. 2 towels
8. Small pillow or rolled towel

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Put on gloves.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Patient should be in supine position. Turn back top bedding.		
7. Prepare bedpan. Sprinkle powder on bedpan to prevent sticking. Place bedpan near patient.		
8. If patient is able to help: a. Have patient flex his or her knees and lift buttocks off mat. Assist by slipping your hand under the lower part of the back. If patient has pajamas or underwear on, lower it to knees.		
b. With your other hand, slip the bedpan under the patient's hips and adjust.		
If patient is unable to help: a. Turn patient on his or her side away from you.		
b. Expose buttocks and position bedpan firmly against buttocks.		

c. Place a small pillow or rolled towel at the top of bedpan at the small of the patient's back.		
d. Turn the patient toward you and onto the bedpan.		
8. For patient safety, remain nearby. Place toilet tissue within the patient's reach.		
9. Return to the patient's side when he or she signals or check on him or her after five minutes. Do not leave a patient on a bedpan over ten minutes. It may lead to extreme discomfort and result in skin breakdown.		
10. If patient is able to assist - Place one hand under the small of the back and assist patient to lift hips. Hold bedpan with other hand.		
If patient is unable to assist - Hold the bedpan with one hand and roll the patient off the bedpan with the other hand. This will prevent spilling the contents of the bedpan.		
11. Wipe patient from front to back with toilet paper and drop paper in bedpan. If patient is on I & O, place paper in appropriate container, not in bedpan.		
12. Remove bedpan, then cover it with a towel.		
13. Wash the perineal area with a warm, wet washcloth from front to back.		
14. Pat area dry from front to back.		
15. Give patient a clean, wet washcloth to wash his or her hands if needed and make patient comfortable.		
16. Take bedpan to bathroom; measure urine if on I & O, and empty contents into toilet.		
17. Rinse and bag bedpan.		
18. Remove gloves and dispose of in appropriate container. Wash hands. Make note of output if necessary.		
19. Send bedpan to appropriate department for cleaning and sterilization.		
20. Report anything unusual to the therapist.		

The student has satisfactorily completed the procedure "ASSIST PATIENT IN USING BEDPAN ON MAT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 3: Assisting the Patient with Comfort and Self-Care

Skill Sheet

ASSIST PATIENT TO USE URINAL (LYING DOWN)

Student Name ________________________________ Date ______________

EQUIPMENT:

1. Urinal and cover
2. Sheet
3. Gloves
4. Washclothes

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Put on gloves.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Turn back sheet. Expose the perineal area.		
7. Place the patient's penis in the urinal and lay the urinal between his legs.		
8. Make sure the urinal is placed at an angle. The flat side should be lying on the bed.		
9. For patient safety, stand nearby.		
10. When patient signals, remove and cover the urinal with a towel.		
11. Give patient a clean, wet washcloth to wash his hands.		
12. Take it to the bathroom and measure urine if on I & O and empty into toilet.		
13. Rinse and bag urinal.		
14. Remove gloves and dispose of in appropriate container. Wash hands. Make note of output if necessary.		
15. Send urinal to appropriate department for cleaning and sterilization.		
16. Report anything unusual to the therapist.		

The student has satisfactorily completed the procedure "ASSIST PATIENT TO USE URINAL (LYING DOWN)" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Written Unit Evaluation

Student Name ______________________________ Date ______________

Circle the letter that corresponds to the best answer.

1. Which of the following is one of the principles of good body mechanics?

   a. Lift loads overhead whenever possible.
   b. Bend the back to lift heavy loads.
   c. Bend hips and knees and lift with legs.
   d. Place feet close together to make a base of support.

2. When preparing to help a patient move, you should:

   a. Move any furniture to the hall outside the patient's room.
   b. Drape any furniture with sheets for the patient's protection.
   c. Allow the patient to help you gather the needed equipment.
   d. Check the floor for slipperiness and have all equipment needed on hand.

3. A patient restraint is a device that:

   a. A patient cannot remove.
   b. Can be removed by the patient.
   c. Is the same as a wheelchair seat belt.
   d. All of the above.

4. When transporting a patient in a wheelchair, you should:

   a. Push the wheelchair forward to go down a curb.
   b. Push the wheelchair forward to go down a ramp.
   c. Pull the wheelchair backward to go up a ramp.
   d. Back the wheelchair into and out of elevators.

5. Where is a transfer belt placed on the patient ready to be transferred?

   a. Over the shoulders
   b. Around each leg
   c. Around the arms
   d. Around the waist

6. What part does an electric wheelchair have that a standard manual wheelchair does not?

   a. Footplates
   b. Brake
   c. Joystick
   d. Wheel and rim

7. In the two-person sitting transfer:

   a. The patient and the caregivers are sitting down then rise to transfer to the bed.
   b. One caregiver reaches under the patient's arms from the back; the other reaches under the patient's thighs and legs.
   c. A sliding board is used to transfer to a treatment table.
   d. Two caregivers assist on either side of the wheelchair.

8. When transporting a patient on a gurney:

   a. Restraints cannot be used.
   b. Side rails are never used.
   c. A small child may be allowed to stand up.
   d. The side rails must be up if the patient is lying down.

9. Which type of transfer involves moving a dependent patient who is still able to help with the transfer?

   a. Dependable transfer
   b. Independent transfer
   c. Passive-assisted transfer
   d. Active-assisted transfer

10. Which of the following actions is appropriate for the physical therapist aide when supervising an independent transfer?

    a. The aide may determine if the patient is able to transfer independently.
    b. The aide should make sure the patient is wearing shoes with nonskid soles.
    c. The aide should discourage the patient from doing any tasks without direct assistance.
    d. The aide should have the patient make any adjustments to the wheelchair if one is used.

11. In which type of transfer may the patient with very weak arms place his or her arms on your shoulders, but not around your neck?

    a. Mechanical lift
    b. Chair-swing transfer
    c. Sliding board transfer
    d. Three-person carry transfer

12. Which type of transfer is preferred during emergency evacuations of patients and when transferring between surfaces of unequal height?

    a. Three-person carry transfer
    b. Stand and pivot transfer
    c. Swing transfer
    d. Sliding board transfer

13. A removable armrest is absolutely necessary for this type of transfer:

    a. A transfer with a mechanical lift.
    b. A sliding board transfer.
    c. A stand and pivot transfer.
    d. An independent transfer

14. Which type of transfer involves the use of a transfer sheet?

    a. Stand and pivot transfer from gurney to mat
    b. Chair swing transfer from gurney to chair
    c. Sliding transfer from gurney to treatment table
    d. Swing transfer from gurney to treatment table

15. When using a mechanical lift, why should you be sure to apply the hooks with the open, sharp ends away from the patient?

    a. To keep the hooks from becoming caught in the chain
    b. To keep the sling from becoming caught in the crank
    c. To avoid injuring the patient
    d. To avoid ripping the canvas sling

Lesson 2: Transfers

Skill Sheet

PERFORM A STAND AND PIVOT TRANSFER (ACTIVE-ASSISTED)

Student Name ____ Date ______________

EQUIPMENT:

1. Wheelchair with removable armrests, with or without swing-away leg rests.
2. Mat or bed
3. Transfer belt
4. Bath blanket or protective pad

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. If at bedside, adjust bed height to low position. Lock brakes of bed.		
7. Assist patient to move to within five or six inches of the edge of the bed.		
8. Assist in putting on socks and nonskid shoes.		
9. Position wheelchair on patient's strong side if indicated; if not, position wheelchair as desired.		
10. Place wheelchair parallel to or at a 45° angle to the bed.		
11. Lock the wheels of the wheelchair.		
12. Cover wheelchair with bath blanket and/or protective pad. Raise footplates and remove if possible. Remove the armrest on the side next to the bed.		
13. Assist the patient to sit up.		
a. Prepare to follow principles of good body mechanics for lifting.		
b. Put one forearm under patient's shoulders and the other behind the knees.		

c. Bend your knees, keep your back straight, and stand with feet about 18 inches apart.		
d. Straighten your hips and knees while shifting weight from front foot to back foot. At the same time, lift patient's head-neck with one arm while pulling the legs over the side of bed with other arm.		
14. Apply transfer belt.		
15. Allow the patient time for his or her circulation to adjust to being in a sitting position before you proceed. Assist the patient in maintaining a sitting position as needed.		
16. Place hands underneath belt along the patient's side with palms up.		
17. Instruct patient to stand on the count of three.		
18. Assist patient to stand and support the weak leg with your knee, if indicated.		
19. Instruct patient to reach with his or her strong hand and grasp for the far armrest of the chair.		
20. Assist the patient to pivot toward his or her strong leg by turning your own body. Do not twist; turn your body as a unit.		
21. Gently assist patient to sit by bending your knees while keeping back straight.		
22. Replace wheelchair parts and make sure they are secure.		
23. Help patient move back in wheelchair, straighten the seat cushion and patient's clothing, and fasten seat belt.		
24. Position the weak arm and leg properly on the armrest and footplate. A pillow may be used to support the weak arm.		
25. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A STAND AND PIVOT TRANSFER (ACTIVE-ASSISTED)" according to the steps outlined.

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Transfers

Skill Sheet

PERFORM A STAND AND PIVOT TRANSFER (PASSIVE-ASSISTED)

Student Name ______________________________ Date ____________________

EQUIPMENT:

1. Wheelchair with removable armrests, with or without swing-away leg rests.
2. Mat or bed
3. Transfer belt
4. Bath blanket or protective pad

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. If at bedside, adjust bed height to low position. Lock brakes of bed.		
7. Assist patient to move to within five or six inches of the edge of the bed.		
8. Assist in putting on socks and nonskid shoes.		
9. Position wheelchair on patient's strong side if indicated; if not, position wheelchair as desired.		
10. Place wheelchair parallel to or at a 45° angle to the bed.		
11. Lock the wheels of the wheelchair.		
12. Cover wheelchair with bath blanket and/or protective pad. Raise footplates and remove if possible. Remove the armrest on the side next to the bed.		
13. Assist the patient to sit up.		
a. Prepare to follow principles of good body mechanics for lifting.		
b. Put one forearm under patient's shoulders and the other behind the knees.		

c. Bend your knees, keep your back straight, and stand with feet about 18 inches apart.		
d. Straighten your hips and knees while shifting weight from front foot to back foot. At the same time, lift patient's head-neck with one arm while pulling the legs over the side of bed with other arm.		
14. Apply transfer belt.		
15. Allow the patient time for his or her circulation to adjust to being in a sitting position before you proceed. Assist the patient in maintaining a sitting position as needed.		
16. Stand directly in front of the patient, grasp the back of the belt.		
17. Support the patient's knees and feet with your knees and feet, either knee-to-knee or your knees on the sides of the patient's knees, whatever is comfortable for you and the patient.		
18. Have the patient lean forward while sitting on the edge of the bed.		
19. On the count of three, have the patient push up as much as possible while you pull him or her up by straightening your legs and hips and holding onto the belt.		
20. Pivot your entire body as well as the patient's.		
21. Lower the patient into the wheelchair by bending at your knees and hips as the patient sits down.		
22. Replace wheelchair parts and make sure they are secure.		
23. Help patient move back in wheelchair, straighten the seat cushion and the patient's clothing, and fasten seat belt.		
24. Adjust footplate for patient; cover with a lap robe.		
25. Position pillow(s) to provide proper body alignment and joint support.		
26. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A STAND AND PIVOT TRANSFER (PASSIVE-ASSISTED)" according to the steps outlined.

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Transfers

Skill Sheet

PERFORM A SWING TRANSFER

Student Name ______________________________ Date ____________________

EQUIPMENT:

1. Wheelchair with removable armrests, with or without swing-away leg rests.
2. Mat or bed
3. Transfer belt

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain to the patient that you are about to assist with the transfer.		
5. Provide privacy.		
6. Position the wheelchair to the patient's strongest/preferred side.		
7. Lock the wheels on the wheelchair.		
8. Remove both leg rests and the armrest nearest the patient; put them out of the way.		
9. Help the patient sit up and slide forward. (While the patient's feet may be on the floor, little or no weight will be borne on them.)		
10. Apply transfer belt.		
11. If possible, let the patient grasp the remaining armrest with one hand; the other hand should be ready to push down on the surface to help raise the body.		
12. Grasp the patient's knees between your knees.		
13. Hold the transfer belt with both of your hands at the patient's sides.		
14. Ask the patient to bend forward and lower his or her head away from the seat of the wheelchair. Explain the count with command sequence; have the patient rock forward with each count.		

15. On the command, using good body mechanics, lift the patient enough to clear the surfaces, directing his or her backside (buttocks) toward the seat of the wheelchair.		
16. Help the patient move back in the wheelchair, straighten the seat cushion and patient's clothing, and fasten the seat belt.		
17. Replace wheelchair parts and make sure they are secure.		
18. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A SWING TRANSFER" according to the steps outlined.

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Transfers

Skill Sheet

PERFORM A SLIDING BOARD TRANSFER

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Sliding board
2. Mat or bed
3. Wheelchair with removable armrest and with or without swing away leg rests
4. Powder or towel or pillowcase

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain the procedure to the patient.		
5. Provide privacy.		
6. Position the wheelchair at an angle next to bed or mat.		
7. Lock the wheels on the wheelchair.		
8. Remove both leg rests and the armrest nearest the patient.		
9. Help the patient sit up and put on a transfer belt.		
10. Have the patient lean away from the wheelchair by rolling up on his or her hips.		
11. Slide the board as far under the patient's hips as possible. Be careful not to pinch the patient's buttocks. Use powder on the board or place a towel or pillowcase under the patient to reduce the chance of friction burns during the transfer.		
12. Place the other end of the board on the wheelchair cushion, bridging just in front of the wheel of the wheelchair.		

13. Have the patient reach for the armrest with the leading hand and try to push his or her body up and toward the wheelchair with the trailing hand. Note: The patient with very weak arms may place his or her arms on your shoulders, but you must never allow the patient to grasp you around your neck.		
14. Steady the patient's knees between your knees.		
15. Grasp the transfer belt with your hands and help the patient slide over to the wheelchair. The sliding process can be either slow or fast, much like the swing transfer. If necessary, this movement may be accomplished by several lift and slide motions.		
16. Remove the sliding board.		
17. Straighten the seat cushion and the patient's clothes, and fasten the wheelchair safety belt.		
18. Replace the armrest and leg rests and be sure they are secure.		
19. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A SLIDING BOARD TRANSFER" according to the steps outlined.

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Transfers

Skill Sheet

PERFORM A SLIDING TRANSFER FROM GURNEY TO TREATMENT TABLE

Student Name ______________________________ Date ____________________

EQUIPMENT:

1. Transfer sheet (or extra sheet)
2. Treatment table
3. Gurney

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain the procedure to the patient.		
5. Provide privacy.		
6. Lock or block wheels of all equipment.		
7. Line up the gurney parallel to the treatment table.		
8. Fold or place patient's arms close to the body.		
9. Remove pillows and be certain the patient's head or feet will not hit any obstacles during the transfer.		
10. Two caregivers stand next to the treatment table and reach across it to grasp the sheet that is under the patient. They may place one of their knees on the table for better body mechanics.		
11. A third caregiver stands on the far side of the gurney and grasps the sheet, lifting slightly to minimize friction.		
12. On the count of three with a command, the caregivers smoothly slide the patient from the gurney to the treatment table.		
13. Replace pillows, cover the patient, straighten sheets, and put up gurney side rails.		
14. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A SLIDING TRANSFER FROM GURNEY TO TREATMENT TABLE" according to the steps outlined.

____ ____________________

Instructor/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Lesson 2: Transfers

Skill Sheet

PERFORM A THREE-PERSON CARRY TRANSFER

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Bed or mat
2. Gurney
3. Treatment table

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain the procedure to the patient.		
5. Provide privacy.		
6. Position treatment table and gurney at right angles, head to foot.		
7. Lock and block wheels. Both treatment table and gurney should be placed against walls in a corner if possible.		
8. Three caregivers line up along the side of the gurney. The tallest caregiver stands at the patient's head and gives the commands.		
9. The caregivers bend their knees using good body mechanics and slide their arms under the patient. The commander's arms go under the patient's head and shoulders, the middle caregiver's arms go under the patient's back and hips, and the remaining caregiver's arms go under the patient's thighs and legs.		
10. Using the count and command system, the caregivers slide the patient to the edge of the gurney.		
11. On a second command, caregivers roll the patient toward their chests and lift the patient by straightening their knees.		
12. On the third command, they walk to the treatment table and use good body mechanics by bending knees to lay the patient down.		
13. The caregivers carefully remove their arms from under the patient.		

14. The patient is positioned comfortably.		
15. The caregivers should wash their hands.		

The student has satisfactorily completed the procedure "PERFORM A THREE-PERSON CARRY TRANSFER" according to the steps outlined.

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Transfers

Skill Sheet

PERFORM A TWO-PERSON SITTING TRANSFER

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Bed or mat
2. Gurney or treatment table

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble necessary equipment.		
3. Identify and greet patient. Identify self.		
4. Explain the procedure to the patient.		
5. Provide privacy.		
6. Position the wheelchair where the transfer is to take place and lock the wheels.		
7. The taller or stronger helper usually stands at the patient's head and gives the commands. This helper reaches under the patient's arms from the back and grasps the patient's crossed wrists in preparation for the lift.		
8. The other helper squats at the side of the patient's knees and reaches under the thighs and legs to lift the patient's lower body. Keep all clothing free of the wheelchair handles.		
9. On a count of three and a command, both caregivers straighten up, lifting the patient up and out of the chair, making sure the patient's hips clear all obstacles.		
10. On command, move the patient by walking or pivoting. Lower the patient to the surface by bending at the knees, using good body mechanics.		
11. Position patient comfortably, straighten patient's clothing as necessary, or cover as appropriate.		
12. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A TWO-PERSON SITTING TRANSFER" according to the steps outlined.

______________________________ ______________

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Transfers

Skill Sheet

PERFORM A MECHANICAL LIFT TRANSFER

Student Name ________________________________ Date ________________

EQUIPMENT:

1. Bed or mat
2. Mechanical lift
3. Wheelchair

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Secure the assistance of another caregiver.		
2. Wash hands.		
3. Assemble necessary equipment.		
4. Identify and greet patient. Identify self and other assistant.		
5. Explain what you are going to do.		
6. Provide privacy.		
7. Position wheelchair next to treatment table with the back of wheelchair in line with the end of the table.		
8. By turning the patient from side to side on the table, you can slide the sling under the patient. Make sure the top of the sling is at the crest of the shoulders and the bottom is above the bend of the knees.		
9. Wheel the lift into place over the patient with the base beneath the table and be sure to lock the wheels of the lift.		
10. Attach the sling to the mechanical lift with the hooks in place under the metal frame. Be sure to apply hooks with open, sharp ends away from the patient to avoid injury.		
11. Have the patient fold both arms across chest, if possible, or place in lap.		
12. Using the crank, lift the patient until the buttocks are clear of the bed. Make sure the patient is aligned in the sling and is securely suspended in a sitting position with legs dangling over the bottom of the sling.		
13. One caregiver should guide the patient's legs over the edge of the table; release brakes on mechanical lift.		

14. Move the lift away from the table, turn the patient so that he or she faces you while the other caregiver guides the patient's body toward the wheelchair by standing behind the patient.		
15. Open the support legs of the lift with the control lever, then bring the lift into position so that the patient is over the seat of the chair.		
16. Release the control knob slowly so that the patient will gradually be lowered into wheelchair.		
17. Remove the hooks from the frame of the lift. Leave sling under patient.		
18. Cover patient with lap robe.		
19. Secure the patient to the wheelchair with safety restraint if ordered.		
20. Make the patient comfortable.		
21. Store lift properly until time to transfer patient again.		
22. Wash hands.		

The student has satisfactorily completed the procedure "PERFORM A MECHANICAL LIFT TRANSFER" according to the steps outlined.

Instructor/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Written Unit Evaluation

1. Which is the covering placed over a patient to expose the part of the body to be treated?

   a. A veil
   b. A cloak
   c. A drape
   d. A wrap

2. In what treatment position do patients lie on their backs?

   a. Side-lying position
   b. Prone position
   c. Horizontal position
   d. Supine position

3. Where should you place pillows for the patient in a side-lying position?

   a. Pillows under the head and between the legs
   b. Pillows at the head, knees, and feet
   c. Pillows under the abdomen and ankles
   d. No pillows should be used in this case

4. Which of the following pieces of exercise equipment is used to reduce friction for very weak patients?

   a. Treadmill
   b. Powder board
   c. Wall pulley
   d. Quadriceps board

5. Which of the following treatments includes the use of electrode gel and electrodes?

   a. Ultrasound
   b. Diathermy
   c. Fluidotherapy™
   d. Electrotherapy

6. Which of the following items are used as positioning aids?

   a. Sandbags and pillows
   b. Bolsters and planks
   c. Pillars and blankets
   d. Towels and ramps

7. The thermometer in a paraffin bath should read between:

   a. 100-105°F.
   b. 118-123°F.
   c. 127-128°F.
   d. 227-230°F.

8. An ice massage is performed with:

   a. An ice pack.
   b. Cold hands.
   c. Ice rolled into a bag.
   d. Ice frozen in a paper cup.

9. When helping the patient into the prone position, the aide begins by first placing the patient in what position?

   a. Supine position
   b. Side-lying position
   c. Vertical position
   d. Horizontal position

10. Which of the following is a function of draping?

    a. Keeps the area sterile
    b. Keeps the patient's room warm
    c. Maintains the patient's privacy
    d. Maintains the lighting in the room

11. When draping a patient with a hospital gown, where should you tie the gown?

    a. At the neck or back
    b. At the bodice or side
    c. Along the gown's seams
    d. Along the gown's folds

12. Who is responsible for adjusting the halter of a traction unit and starting the traction?

    a. The physical therapist aide
    b. The physical therapist or assistant
    c. The on-duty nurse
    d. The attending physician

13. What is the appropriate range of water temperature for hydrotherapy treatment in a whirlpool tank?

    a. 85°-98°F
    b. 96°-105°F
    c. 105°-113°F
    d. 127°-130°F

14. What is the most serious risk to the patient during hydrotherapy?

    a. Freezing
    b. Superficial burning
    c. Drowning
    d. Deep burning

15. When assisting a patient to the head of an exercise mat, the aide can avoid friction burns and better move the patient by:

    a. Pulling the patient up in one, quick movement.
    b. Pulling the patient up with a harness strap.
    c. Placing clothing or a sheet under the patient.
    d. Placing bolsters along the side of the mat.

16. When draping for a back treatment, what special consideration might be taken with a female patient?

    a. Insist that she wear a hospital gown
    b. Wrap a blanket around her shoulders
    c. Place foam wedges along her sides
    d. Place rolled towels at the sides of her chest

17. Which of the following is a thermal heating modality?

    a. Ice massages
    b. Warmth massages
    c. Hot packs
    d. Cold packs

18. In what type of thermal treatment are sound waves used to produce heat?

    a. Ultrasound
    b. Diathermy
    c. Fluidotherapy™
    d. Hot packs

Lesson 1: Positioning

Skill Sheet

MOVE/ASSIST PATIENT TO HEAD OF MAT (ONE PERSON)

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Mat, treatment table, or hospital bed
2. Pillow
3. Sheet

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy.		
5. If the patient has any tubing coming from his or her body, make sure it will move freely with the patient.		
6. Move pillow to wall so patient does not hit his or her head when moving up.		
7. Help patient bend his or her knees and press feet firmly against the mat.		
8. If patient is able, have him or her grasp head of mat, otherwise cross his or her arms over chest.		
9. Kneel on mat and slide one arm under the patient's shoulders and the other under the thighs.		
10. On the count of three, have the patient push with his or her feet as you shift your weight and slide the patient up on the mat.		
11. Replace pillow.		
12. Make the patient comfortable; reposition tubing if needed; adjust sheet.		
13. Wash hands.		

The student has satisfactorily completed the procedure "MOVE/ASSIST PATIENT TO HEAD OF MAT (ONE PERSON)" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Lesson 1: Positioning

Skill Sheet

MOVE PATIENT TO HEAD OF MAT (TWO PERSON)

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Mat, treatment table, or hospital bed
2. Pillow
3. Draw sheet or folded regular sheet
4. Sheet

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Ask another aide to work with you.		
2. Wash hands.		
3. Identify and greet patient. Identify self and other aide.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. If the patient has any tubing coming from his or her body, be sure it will move freely with the patient.		
7. Move pillow to wall so patient does not hit his or her head when moving up.		
8. Caregivers should kneel on opposite sides of the patient.		
9. Position a draw sheet or folded regular sheet under shoulders and hip area. Each aide should roll edges of sheet toward patient's body and grasp rolled sheet with his or her hands at the patient's shoulders and at the mid-hip area.		
10. On the count of three, each aide lifts the patient up off the surface of the mat and toward the head of the mat.		
11. Replace pillow.		
12. Make the patient comfortable; reposition tubing; adjust sheet.		
13. Wash hands.		

The student has satisfactorily completed the procedure "MOVE PATIENT TO HEAD OF MAT (TWO PERSON)" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 1: Preparation for Treatment

Skill Sheet

MOVE PATIENT TO ONE SIDE OF THE MAT

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Mat, treatment table, or hospital bed
2. Draw sheet (if appropriate)
3. Sheet

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy.		
5. If the patient has any tubing coming from his or her body, be sure it can move freely with the patient.		
6. Stand or kneel on the side of the mat toward which you intend to move the patient.		
7. Slide both arms under the patient's back to his or her far shoulder, then slide the patient's shoulders toward you on your arms. Keep your back straight as you slide the patient.		
8. Slide both your arms as far as you can under the patient's buttocks and slide his or her buttocks toward you. Use a draw sheet whenever possible.		
9. Place both your arms under the patient's feet and slide them toward you on your arms.		
10. Make the patient comfortable; reposition tubing if needed; adjust sheet.		
11. Wash hands.		

The student has satisfactorily completed the procedure "MOVE PATIENT TO ONE SIDE OF THE MAT" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 1: Positioning

Skill Sheet

PLACE PATIENT IN SUPINE POSITION FOR TREATMENT

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Mat, treatment table, or hospital bed
2. Pillows
3. Sheet

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy.		
5. Assist patient to lie on back.		
6. Place pillow under head.		
7. Place pillow under knees.		
8. Cover patient with sheet.		
9. Ask patient if he or she is comfortable.		
10. Notify therapist or assistant that patient is ready for treatment.		
11. Wash hands.		

The student has satisfactorily completed the procedure "PLACE PATIENT IN SUPINE POSITION FOR TREATMENT" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Lesson 1: Preparation for Treatment

Skill Sheet

PLACE PATIENT IN SIDE-LYING POSITION FOR TREATMENT

Student Name ________________________________ Date ______________

EQUIPMENT:

1. Mat, treatment table, or hospital bed
2. Pillows
3. Sheet

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy.		
5. If the patient has any tubing coming from his or her body, make sure it will move freely with the patient.		
6. Check to see that the patient has ample space to turn without getting too close to the edge of the mat.		
7. Cross the patient's arms over his or her chest.		
8. Turning patient toward you a. Cross the leg farthest from you over the leg closest to you.		
b. Reach across the patient and put one hand behind his or her far shoulder.		
c. Place your other hand behind his or her far hip, gently roll him or her toward you.		
Turning patient away from you a. Cross the leg closest to you over the leg farthest from you.		
b. Place one hand on the patient's shoulder near you.		
c. Put your other hand under patient's buttocks, turn him or her gently on his or her side, facing away from you.		

9. Support the patient's head with the palm of one hand and slide a pillow under his or her head and neck with your other hand.		
10. Position patient's knees slightly flexed, upper leg more than the lower leg. Support upper leg on pillow.		
11. Make the patient comfortable; reposition tubing if needed; adjust sheet.		
12. Wash hands.		

The student has satisfactorily completed the procedure "PLACE PATIENT IN SIDE-LYING POSITION FOR TREATMENT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 1: Positioning

Skill Sheet

PLACE PATIENT IN PRONE POSITION FOR TREATMENT

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Mat, treatment table, or hospital bed
2. Pillows
3. Sheet

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy.		
5. If the patient has any tubing coming from his or her body, make sure it will move freely with the patient.		
6. Help patient move to side of mat.		
7. Assist patient to turn to side-lying position.		
8. Again, move patient to side of bed you are on.		
9. Patient's lower arm may remain at side or be positioned away from the body.		
10. Cross upper leg over lower leg.		
11. Roll patient onto abdomen.		
12. Turn head to one side. A small, firm pillow/folded blanket can be placed under the head for comfort.		
13. Assist patient to bend arms at elbows and raise them next to the head. A small pillow may be placed under the shoulder on the same side as the face.		
14. For female patients, a small, firm pillow may be placed under abdomen to prevent pressure on breasts and rolls may be placed at sides of chest for privacy.		

15. Extend feet over end of mat or slightly elevate feet off mat by flexing knees and placing pillow under lower legs.		
16. Make the patient comfortable; reposition tubing if necessary; adjust sheet.		
17. Wash hands.		

The student has satisfactorily completed the procedure "PLACE PATIENT IN PRONE POSITION FOR TREATMENT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Draping

Skill Sheet

DRAPE UPPER EXTREMITY FOR TREATMENT (SITTING POSITION)

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Treatment table
2. Chair
3. 2 pillows
4. Linens

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. If the patient is in street clothes or pajamas, have him or her remove upper body clothing.		
7. Have patient either: a. Put on a hospital gown leaving affected arm outside, tying it in back or		
b. Drape a sheet around unaffected shoulder leaving affected arm exposed.		
8. Have the patient sit in a chair facing the treatment table.		
9. Secure gown or sheet so the drape does not slip.		
10. Cover exposed shoulder and arm with a towel.		
11. Notify the therapist or assistant that the patient is ready for treatment.		
12. Wash hands.		

The student has satisfactorily completed the procedure "DRAPE UPPER EXTREMITY FOR TREATMENT (SITTING POSITION)" according to the steps outlined.

______________________________ ________________

Instructor's/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Lesson 2: Draping

Skill Sheet

DRAPE UPPER EXTREMITY FOR TREATMENT (SUPINE POSITION)

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Treatment table
2. Chair
3. 2 pillows
4. Linens

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. If the patient is in street clothes or pajamas, have him or her remove upper body clothing.		
7. Assist patient in putting on hospital gown leaving affected arm outside, tying it in back.		
8. Assist the patient to lie supine; keep the back of the gown out from under the patient.		
9. Put pillows under the patient's head and knees.		
10. Cover the patient with a sheet and position affected extremity comfortably on top of the sheet.		
11. Pull the sheet into the axilla (armpit) snugly.		
12. Cover exposed shoulder and arm with a towel.		
13. Notify the therapist assistant that the patient is ready for treatment.		
14. Wash hands.		

The student has satisfactorily completed the procedure "DRAPE UPPER EXTREMITY FOR TREATMENT (SUPINE POSITION)" according to the steps outlined.

______________________________ ________________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 2: Draping

Skill Sheet

DRAPE LOWER EXTREMITY FOR TREATMENT

Student Name ________________________________ Date ________________

EQUIPMENT:

1. Treatment table, mat, or bed
2. 2 pillows
3. Linens

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist the patient in removal of clothing to expose the leg to be treated.		
7. If the patient wishes to remove upper body clothing, assist patient in putting on a hospital gown.		
8. Help the patient lie supine on the treatment table.		
9. Place a pillow under the patient's head.		
10. Cover the patient with a sheet.		
11. Fold the sheet to the midline, uncovering the leg to be treated.		
12. Lift this leg slightly and pull the sheet well up under the leg.		
13. Tuck the end of the sheet in under the patient's waist.		
14. Cover the patient's leg with a towel.		
15. Notify the therapist or assistant that the patient is ready for treatment.		

The student has satisfactorily completed the procedure "DRAPE LOWER EXTREMITY FOR TREATMENT" according to the steps outlined.

____ ____________________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 2: Draping

Skill Sheet

DRAPE FOR BACK TREATMENT

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Treatment table, mat, or bed
2. 2 pillows
3. Linens
4. 2 towels

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Instruct or assist the patient in putting on a hospital gown with the ties in the back.		
7. Help the patient lie prone on the treatment table.		
8. Place pillow under the patient's abdomen and ankles for comfort.		
9. Cover the patient with a sheet.		
10. Expose the patient's back by lowering the sheet to hip level. Open the hospital gown to expose the back.		
11. A female patient may appreciate rolled towels placed at the sides of her chest for modesty. Place a towel across the patient's upper back.		
12. Notify the therapist or assistant that the patient is ready for treatment.		
13. Wash hands.		

The student has satisfactorily completed the procedure "DRAPE FOR BACK TREATMENT" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) — Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH HOT PACK TREATMENTS

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Treatment table
2. Hot packs in hot pack machine
3. Hot pack covers or thick terry cloth towels or bath blankets
4. Linens
5. Call bell or tap bell

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Position and drape the patient comfortably as directed.		
8. Wrap the hot pack in towels or specially shaped foam-filled hot pack covers.		
9. Bring the hot pack to the patient's side.		
10. Place call bell or tap bell where patient can reach it.		
11. Notify therapist or assistant that the patient is ready for treatment.		
12. After treatment, remove the hot pack from the patient.		
13. Dry the patient's skin with a towel.		
14. Cover the area to keep the patient warm.		
15. Return the hot pack to the heating machine.		
16. Hang the hot pack covers to dry or place towels in the laundry container.		

17. Notify the therapist or assistant that the patient is ready for the rest of the treatment.		
18. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH HOT PACK TREATMENTS" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH ULTRASOUND TREATMENTS

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Treatment table
2. Ultrasound
3. Linens, towels, and sheets
4. Gel, alcohol

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Position and drape patient comfortably as directed.		
8. Position the ultrasound machine where the patient is to be treated.		
9. Plug the machine into the electrical wall socket.		
10. Place warmed gel or lotion on or near the ultrasound machine.		
11. Place extra terry cloth towels nearby for re-moving excess lotion or gel.		
12. Notify therapist or assistant that patient is ready for treatment.		
13. After treatment, return the ultrasound machine to its storage place in the clinic.		
14. Return lotion or gel to a warmer or leave it with the machine.		
15. Place soiled linens in the hamper.		
16. Notify therapist or assistant that patient is ready for rest of treatment.		
17. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH ULTRASOUND TREATMENTS" according to the steps outlined.

______________________________________ ____________________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH PARAFFIN BATH

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Treatment table
2. Paraffin bath
3. 4-6 Paper towels
4. 2-4 Safety pins or Velcro™ straps or adhesive tape
5. 2 terry cloth towels
6. Pillow(s)

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Check the temperature of the paraffin.		
8. Assist patient in rolling up long sleeves.		
9. Direct the patient to wash and dry his or her hands.		
10. Have patient sit while waiting for therapist.		
11. Notify therapist or assistant that patient is ready for treatment.		
12. When the time is up, have the patient move the fingers inside the paraffin to loosen it.		
13. Grasp the outer towel; pull paraffin and towels off together.		
14. Help the patient dry moisture off the hands with a clean towel.		
15. Separate the towels and paraffin.		
16. Place used paraffin in the recycling container.		

17. Discard paper towels.		
18. Put cloth towels in a laundry hamper.		
19. Notify therapist or assistant that patient is ready for the rest of the treatment.		
20. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH PARAFFIN BATH" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH DIATHERMY

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Treatment table
2. Diathermy or heat lamp
3. Linens
4. Timer
5. Call bell or tap bell

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Position and drape the patient comfortably as indicated.		
8. Place the diathermy machine near the patient and plug it into the wall electrical socket.		
9. Place call bell or tap bell where patient can reach it.		
10. Notify the therapist or assistant that the patient is set up for treatment.		
11. After the treatment is complete, turn the machine off.		
12. Remove the machine from the patient, unplug it, and store it.		
13. Cover the treated areas with a towel.		
14. Notify the therapist or assistant that the patient is ready for the rest of the treatment.		
15. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH DIATHERMY" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH FLUIDOTHERAPY™

Student Name ____ Date ____________________

EQUIPMENT:

1. Treatment table
2. Fluidotherapy™
3. Linens
4. Call bell or tap bell

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Remove patient's clothing to above the elbow for arm treatment or the knee for leg treatment.		
7. Seat the patient comfortably beside the machine so that the affected arm or leg can be placed through the "port" or opening.		
8. Place call bell or tap bell where patient can reach it.		
9. Notify the therapist or assistant that the patient is ready for treatment.		
10. After the treatment, have the patient shake off the ground corncobs from the arm or leg while it is still in the machine.		
11. Pull the arm or leg out of the machine port. Replace the patient's clothing.		
12. Notify therapist or assistant that the patient is ready for the rest of the treatment.		
13. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH FLUIDOTHERAPY™" according to the steps outlined.

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Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion)

Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH ICE PACK TREATMENTS

Student Name ____ Date ____________________

EQUIPMENT:

1. Ice packs (or ice bags)
2. Towels
3. Call bell or tap bell
4. Timer

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Position and drape the patient comfortably as indicated.		
8. Wrap the ice pack in a pillowcase or terry cloth towel according to the therapist's or assistant's instructions.		
9. Place a call bell or tap bell where the patient can reach it.		
10. Notify therapist or assistant that patient is ready for treatment.		
11. After the treatment, return the ice pack to the freezer unit.		
12. Put used linens in the laundry hamper.		
13. Notify the therapist or assistant that the patient is ready for the rest of the treatment.		
14. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH ICE PACK TREATMENTS" according to the steps outlined.

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Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH ICE MASSAGE

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Ice frozen in a small cup
2. Towels
3. Sheets

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Position and drape patient comfortably as indicated.		
8. Place several extra towels nearby the treatment area to catch the water as the ice melts.		
9. Take the ice, which has been frozen in a small paper cup, from the freezer or ice pack machine.		
10. Peel part of the cup away, exposing the ice.		
11. Notify the therapist or assistant that the patient is ready for the ice massage.		
12. After treatment, discard the remaining paper cup and ice in an appropriate container.		
13. Put used linens in the laundry hamper.		
14. Notify therapist or assistant that patient is ready for the rest of the treatment.		
15. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH ICE MASSAGE" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH HYDROTHERAPY

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Whirlpool
2. Towels
3. Linens
4. Timer
5. Call bell or tap bell

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. If more than one whirlpool is available, select one of appropriate size.		
8. Close the drain.		
9. Fill the whirlpool to 2/3 full, covering the agitator intakes and adjusting the temperature at the valves (between 96°F and 105°F).		
10. Switch on the turbine and adjust water pressure.		
11. Pour in additives as directed by the patient's therapist or assistant.		
12. Make sure a stool or whirlpool chair is in place and wheel castors are locked.		
13. Put linens, the timer, and a call bell nearby.		
14. Turn off the turbine.		
15. Notify the therapist or assistant that the hydrotherapy unit is ready.		
16. Assist the therapist or assistant in placing the patient in whirlpool.		

17. If indicated by therapist, stay close to whirlpool during treatment.		
18. When the treatment is finished, help the therapist remove the patient from the water.		
19. Dry the treated area with a clean towel. If there is an open wound, assist the therapist or assistant in dressing the wound.		
20. Put used linens in laundry hamper.		
21. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH HYDROTHERAPY" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH ELECTROTHERAPY

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Electrotherapy equipment
2. Linens

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on attire appropriate for therapy.		
7. Position and drape patient comfortably as directed.		
8. Cover patient with sheet.		
9. Place electrotherapy equipment near patient.		
10. Notify the therapist or assistant that patient is ready for treatment.		
11. After treatment is complete, discard used materials in appropriate container.		
12. Place used linens in laundry hamper.		
13. Store equipment.		
14. Notify therapist or assistant that patient is ready for the rest of the treatment.		
15. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH ELECTROTHERAPY" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH CERVICAL TRACTION

Student Name ______________________ Date ____________

EQUIPMENT:

1. Halter and cervical traction machine
2. Linens
3. Call bell or tap bell

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Assist patient in putting on proper attire for therapy.		
7. Place the halter loosely on the patient.		
8. Help the patient sit or lie supine with the head toward the traction unit.		
9. Place a call bell or tap bell near the patient.		
10. Tell the therapist or assistant that the patient is ready for the traction to be set.		
11. After treatment, put equipment away.		
12. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH CERVICAL TRACTION" according to the steps outlined.

______________________________ ____________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

Lesson 3: Assisting with Treatment

Skill Sheet

ASSIST WITH LUMBAR TRACTION

Student Name ______________________________ Date ____________

EQUIPMENT:

1. Lumbar belt and lumbar traction machine
2. Linens
3. Call bell or tap bell

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Assemble equipment.		
3. Identify and greet patient. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Make sure the traction table is locked together.		
7. Assist patient in putting on proper attire.		
8. Help the patient put on the chest restraint.		
9. Help the patient lie down on the traction table with his or her feet toward the traction unit.		
10. Have patient raise hips and position the lumbar belt around the patient's hips and fasten it loosely.		
11. Fasten the restraint straps to the head of the table.		
12. Place a sheet over the patient.		
13. Place a call bell or tap bell near the patient.		
14. Notify the therapist or assistant that the patient is ready for the traction to be set.		
15. After treatment and the therapist or assistant has assisted the patient off of the traction table, return equipment to proper location.		
16. Discard used linen in laundry hamper.		

17. Wash hands.		

The student has satisfactorily completed the procedure "ASSIST WITH LUMBAR TRACTION" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion)

Date

Written Unit Evaluation

Circle the letter that corresponds to the best answer.

1. Range of Motion (ROM) means:

   a. Training joints to surpass their normal flexibility range.
   b. Exercising joints to reach their maximum flexibility potential.
   c. Flexing joints to increase their flexibility range potential.
   d. Moving joints through as much of their normal range as possible.

2. What is the purpose of ROM exercises?

   a. To help maintain flexibility and regain strength
   b. To increase cardiovascular endurance and tone muscle mass
   c. To decrease muscle atrophy and raise lung capacity
   d. To decrease body fat and increase cardiovascular endurance

3. In which type of ROM exercises does the caregiver or equipment apply a force to make the patient work harder?

   a. Passive
   b. Active-assistive
   c. Active
   d. Resistive

4. In which type of ROM exercises does the patient move without assistance from the caregiver?

   a. Passive
   b. Active-assistive
   c. Active
   d. Resistive

5. Which terms describe bending and straightening the ankle joint?

   a. Lateral rotation and medial rotation
   b. Dorsiflexion and plantar flexion
   c. Supination and pronation
   d. Inversion and eversion

6. Movements away from and toward the midline of the body are referred to as:

   a. Abduction and adduction.
   b. Supination and pronation.
   c. Inversion and eversion.
   d. Flexion and extension.

7. Which of the following is an appropriate tip for performing ROM exercises?

   a. Surpass the recommended number of repetitions to encourage faster recovery.
   b. Maintain a very tight and heavy hold on the patient to prevent falls and injuries.
   c. Support as many joints as possible during the ROM exercises.
   d. Do not allow the patient any choices in the exercise program.

8. What is gait training?

   a. Process of training the patient to maintain balance
   b. Process of teaching the patient to use wheelchairs
   c. Process of training the patient to stand
   d. Process of teaching the patient to walk

9. Her therapist instructs you that Mrs. Cox needs a caregiver to stay nearby as she practices ambulation. What type of assistance does she require?

   a. Standby assistance
   b. Maximal assistance
   c. Minimal contact assistance
   d. Moderate contact assistance

10. When Mr. Erickson, the aide, helps Mr. Hernandez with ambulation, he firmly holds the gait belt when Mr. Hernandez is ambulating. What type of assistance is Mr. Erickson providing?

    a. Contact assistance
    b. Noncontact assistance
    c. Standby assistance
    d. Side-by-side assistance

11. What is the appropriate action if a patient begins to fall and you cannot assist him or her to regain balance?

    a. Hold onto the gait belt and the patient's shoulder, then use your thigh to slide the patient to the floor.
    b. Hold onto the patient around the waist, then lower yourself and the patient to the ground by squatting.
    c. Hold onto the patient's shoulders, then lower yourself and the patient to the floor by squatting.
    d. Hold onto the gait belt and the patient's waist, then help the patient lie on the floor.

12. If the patient is able to place a portion of his or her body weight on an extremity, which weight-bearing category describes this situation?

    a. Nonweightbearing
    b. Touch weight bearing
    c. Partial weight bearing
    d. Full weight bearing

13. The tilt table and parallel bars are used as:

    a. Ambulation aids.
    b. Preambulation aids.
    c. Weight bearing guides.
    d. Weight bearing aids.

14. Who selects the patient's ambulation device?

    a. Therapist's assistant
    b. Physical therapist aide
    c. Therapy nurse
    d. Physical therapist

15. What are the three points in the three-point gait pattern?

    a. The two feet and the cane
    b. The two feet and one crutch
    c. Two crutches and the unaffected foot
    d. The walker and the two feet

16. When the aide helps a patient climb stairs with crutches, what leads the first step?

    a. The affected leg
    b. The unaffected leg
    c. The left crutch
    d. Both crutches

17. If Mrs. Jones is walking with a cane and her left leg is weak, how should she hold the cane?

    a. Under her left arm
    b. With both hands
    c. In her left hand
    d. In her right hand

Lesson 1: Range of Motion Exercises

Skill Sheet

COMPLETE UPPER EXTREMITY ROM EXERCISES

Student Name ______________________________ Date ________________

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy. Make sure patient is wearing appropriate clothing.		
5. Assist patient into supine position.		
6. Shoulders a. Flexion/extension (1) Support the arm at the wrist and elbow, and lift the arm toward the ceiling. Continue lifting the arm over the patient's head until you feel resistance.		
(2) Slowly lower the arm to the patient's side.		
b. Abduction/adduction (1) Support the arm at the elbow and shoulder, and move the arm out to the side, continue moving toward patient's head.		
(2) Slowly move the arm back toward the center of body.		
c. Lateral/medial rotation (1) Move the arm away from the body to shoulder level.		
(2) Bend the elbow at a 90° angle. Rotate the hand forward to touch the mat and then backward to touch the mat.		
7. Elbow a. Flexion/extension (1) Bend the arm at the elbow.		
(2) Bring the hand toward the shoulder, then straighten the arm.		
b. Supination/pronation (1) Hold the patient's hand in a handshake position; support the arm at the elbow joint with the elbow bent.		

(2) Turn palm up and then down.		
8. Wrist a. Flexion/extension - support arm and hand; bend the wrist forward, straighten it, and then bend it backward.		
b. Abduction/adduction - move the hand from side to side at the wrist.		
9. Fingers a. Flexion/extension - support the hand at the wrist; gently straighten the fingers and thumb, then curl the fingers and thumb.		
b. Abduction/adduction - move each finger away from the nearest finger and then return it.		
c. Thumb opposition - bend the thumb toward the base of the little finger and back.		
10. Repeat with opposite arm.		
11. Make the patient comfortable.		
12. Wash hands.		
13. Notify therapist that patient is ready for next treatment.		

The student has satisfactorily completed the procedure "COMPLETE UPPER EXTREMITY ROM EXERCISES" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 1: Range of Motion Exercises

Skill Sheet

COMPLETE LOWER EXTREMITY ROM EXERCISES

Student Name ______________________________ Date ________________

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain what you are going to do.		
4. Provide privacy--make sure patient is wearing appropriate clothing.		
5. Assist patient into supine position.		
6. Knee flexion/extension a. Support the leg at the ankle and calf, flex the leg at the hip and knee.		
b. Bend and straighten the knee.		
7. Hip a. Flexion/extension (1) Bend the knee and move it toward the chest, flexing the hip. Slowly straighten the hip and knee.		
(2) Support the leg at the knee and ankle, keep the knee straight; raise leg slowly and then lower.		
b. Abduction/adduction (1) Slowly move the leg straight out to the side of the body until you feel resistance.		
(2) Move the leg back toward the center of the body.		
c. Lateral/medial rotation - with leg lying flat on mat, roll the leg to produce lateral and medial rotation of the hip.		
8. Ankle and foot a. Dorsiflexion/plantar flexion - bend the foot up toward the knee, then down.		
b. Inversion/eversion - support the foot at the ankle joint. Turn the sole toward the opposite foot and then away from the opposite foot.		

9. Toes a. Flexion/extension - bend and then straighten the toes.		
b. Abduction/adduction - move each toe away from the next toe and then toward the next toe.		
10. Repeat with opposite leg.		
11. Make the patient comfortable.		
12. Wash hands.		
13. Notify therapist that patient is ready for next treatment.		

The student has satisfactorily completed the procedure "COMPLETE LOWER EXTREMITY ROM EXERCISES" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Ambulation

Skill Sheet

AMBULATE A PATIENT WITH A PARTIAL WEIGHT-BEARING GAIT USING A WALKER AND CONTACT ASSISTANCE

Student Name ________________________________ Date ________________

EQUIPMENT:

1. Walker appropriate for patient
2. Gait belt
3. Wheelchair or armchair

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain that you are going to practice walking with a walker.		
4. Assist patient to sit on edge of chair. Make sure patient has on appropriate attire for ambulation.		
5. Give patient gait belt to put around waist. Assist if needed.		
6. Place walker in front of patient and grasp gait belt in back.		
7. Stand on patient's affected side. NOTE: Use good body mechanics throughout procedure.		
8. Continue to hold gait belt in one hand and hold patient's shoulder in other hand.		
9. Ask the patient if he or she is ready to walk. Ask patient to stand by pushing up with arms. Assist patient by lifting on gait belt.		
10. Observe that patient grasps walker after standing up.		
11. Pause to allow patient to regain balance.		
12. Instruct patient to move walker forward by lifting it up.		
13. Observe that patient takes a step forward with the affected leg first.		
14. Walk patient the distance instructed by therapist.		

15. Return patient to mat or chair. To ambulate backward, resident steps back with strong foot, takes a step back with affected foot, then moves the walker back. Have patient feel for seat of chair or mat with back of legs.		
16. Observe that patient reaches back with both hands and sits down slowly.		
17. Make sure patient is comfortable.		
18. Place walker out of the way.		
19. Remove gait belt.		
20. Wash hands.		
21. Record observations.		

The student has satisfactorily completed the procedure "AMBULATE A PATIENT WITH A PARTIAL WEIGHT-BEARING GAIT USING A WALKER AND CONTACT ASSISTANCE" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Ambulation

Skill Sheet

AMBULATE A PATIENT WITH THREE-POINT, NONWEIGHTBEARING GAIT USING CRUTCHES AND CONTACT ASSISTANCE

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Crutches appropriate for patient
2. Gait belt
3. Wheelchair or armchair

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain that you are going to practice walking with crutches.		
4. Make sure patient has on appropriate attire for ambulation.		
5. Assist patient to move away from the back of the chair resting heel of affected leg on floor.		
6. Give gait belt to patient to put around waist, assisting if necessary.		
7. Stand on the side of the patient's affected leg. Position crutches to front and side of chair on affected side, and have patient hold crutches at handholds. NOTE: Use good body mechanics throughout procedure.		
8. Ask patient if he or she is ready to stand up; grasp gait belt in back with one hand, and place opposite hand lightly at patient's shoulder.		
9. Ask patient to stand up without putting weight on affected foot. Give patient a moment to regain balance.		
10. Observe as patient uses free hand to grasp the hand hold of a crutch and place it under arm on unaffected side.		
11. Observe as patient rotates other crutch around and under arm on affected side.		
12. Allow patient time to adjust clothing and crutches for comfort and to be sure crutches are securely under arms.		

13. Ask patient if he or she is ready to ambulate. Have patient hold affected leg off floor and move crutches forward, steadying at gait belt and shoulder if necessary.		
14. Remain in contact with the patient as he or she patient presses down with hands and swings unaffected foot forward, keeping affected foot off floor.		
15. Continue ambulating to the specified distance. Return patient to chair, allowing patient to back up to the chair until the back of the unaffected leg touches it.		
16. Remain in contact while patient takes crutch out from under arm on affected side and holds it by the handpiece.		
17. Observe as patient takes crutch out from under unaffected side and moves it to the hand on the affected side so that the two crutches are lined up.		
18. Observe and assist as necessary as patient reaches back to grasp arm of chair on unaffected side and sits down.		
19. Move crutches out of the way.		
20. Assist patient in removing gait belt and assuming comfortable position in chair.		
21. Wash hands.		
22. Record observations.		

The student has satisfactorily completed the procedure "AMBULATE A PATIENT WITH THREE-POINT, NONWEIGHTBEARING GAIT USING CRUTCHES AND CONTACT ASSISTANCE" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Ambulation

Skill Sheet

AMBULATE A PATIENT UP AND DOWN STAIRS WITH CRUTCHES

Student Name ______________________________ Date ______________

EQUIPMENT:

1. Crutches appropriate for patient
2. Gait belt
3. Wheelchair or armchair

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
To go up the stairs 1. Patient stands at base of stairs. Stand behind patient with one hand on patient's gait belt, and other hand on patient's shoulder.		
2. The patient must step up first with the unaffected, or stronger, leg.		
3. Then the affected, or weaker, leg is brought up.		
4. Direct patient to bring up both crutches. Allow patient to regain balance.		
5. Repeat process up the stairs.		
To go down stairs 1. Patient stands at top of stairs.		
2. Stand in front of the patient, two or three steps down, with one hand on the belt, the other hand at the patient's shoulder.		
3. The crutches are moved down first.		
4. The affected leg is moved down.		
5. The unaffected is lowered last.		
6. Repeat process down the stairs.		

The student has satisfactorily completed the procedure "AMBULATE A PATIENT UP AND DOWN STAIRS WITH CRUTCHES" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature Date
(Verifying Satisfactory Completion)

Lesson 2: Ambulation

Skill Sheet

AMBULATE A PATIENT USING A CANE AND CONTACT ASSISTANCE

Student Name ______________________________ Date ________________

EQUIPMENT:

1. Cane appropriate for patient
2. Gait belt
3. Wheelchair or armchair

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain that you are going to practice walking with a cane.		
4. Assist patient to scoot to edge of mat or chair. Make sure patient has on appropriate attire.		
5. Have patient put gait belt around waist, assisting as needed.		
6. Stand on patient's weak side. Place one hand on the gait belt and the other hand on the shoulder. NOTE: Use good body mechanics throughout the procedure.		
7. Ask patient if he or she is ready to walk, and have patient stand on command. Assist the patient to a standing position by lifting on the gait belt.		
8. Pause to allow patient to regain balance.		
9. Remind patient to move cane forward and a little out to the side of the strong leg. Patient should take short steps, and keep head up and eyes looking forward.		
10. Observe that patient moves weak extremity forward to line up evenly with tip of cane just after cane is placed.		
11. Observe that patient puts weight on cane and weak foot while swinging strong foot forward, taking a step.		
12. Walk in the same pattern as the patient (both step with same foot at the same time).		

13. **Walk the distance instructed by therapist.**		
14. **Return patient to mat or chair and assist patient to sit by backing up until legs touch seat.**		
15. **Observe that patient reaches back with both hands and sits down slowly.**		
16. **Make certain the patient is comfortable in the chair and the cane is placed out of the way.**		
17. **Remove gait belt.**		
18. **Wash hands.**		
19. **Record observations.**		

The student has satisfactorily completed the procedure "AMBULATE A PATIENT USING A CANE AND CONTACT ASSISTANCE" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 2: Ambulation

Skill Sheet

AMBULATE A PATIENT USING A GAIT BELT ONLY AND CONTACT ASSISTANCE

Student Name ______________________________ Date ____________________

EQUIPMENT:

1. Gait belt
2. Wheelchair or armchair

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands.		
2. Identify and greet patient. Identify self.		
3. Explain and greet patient. Identify self.		
4. Assist patient to sit on edge of chair. Make sure patient's attire is appropriate for ambulation.		
5. Give patient gait belt to put around waist, assisting as necessary.		
6. Stand on patient's weaker side. Place one hand on the gait belt, and the other at the patient's shoulder.		
7. Ask patient if he or she is ready to walk. Ask patient to stand by using arms to push up on arm rests. Assist patient as needed by lifting on gait belt.		
8. Pause to allow patient to regain balance.		
9. Walk in the same pattern as the patient (both step with same foot at the same time).		
10. Walk patient the distance instructed by therapist.		
11. Return patient to chair. Have patient back up to chair and lower self slowly with arms.		
12. Make sure patient is comfortable.		
13. Remove gait belt if finished ambulating.		
14. Wash hands.		
15. Record observations.		

The student has satisfactorily completed the procedure "AMBULATE A PATIENT USING A GAIT BELT AND CONTACT ASSISTANCE" according to the steps outlined.

____ ________________

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Written Unit Evaluation

Circle the letter that corresponds to the best answer.

1. When using cleaning chemicals, it is important to:

   a. Always work with a partner.
   b. Wear old clothes and a supply vest.
   c. Read the Material Safety Data Sheet.
   d. Never allow patients in the area.

2. The supply of linens in a physical therapy department should be enough for:

   a. Two or three days.
   b. Two or three weeks.
   c. Two or three months.
   d. Two or more years.

3. How often should the paraffin bath be drained and cleaned?

   a. Daily
   b. Every other day
   c. Weekly
   d. Monthly

4. Which of the following small tools should be cleaned and carefully stored after the therapist evaluates the patient?

   a. Ultrasound and electrode gel
   b. Sandbags and dumbbell weights
   c. Crutches, canes, and walkers
   d. Goniometer and tape measures

5. The supply of disposable supplies in the physical therapy clinic should be enough to last about one or two:

   a. Days.
   b. Weeks.
   c. Months.
   d. Years.

6. How should the tank surfaces of the hydrotherapy equipment be cleaned?

   a. Clean with hot water, disinfectant, and a brush, then allow surfaces to dry completely.
   b. Clean with lukewarm, sudsy water, then allow surfaces to dry completely.
   c. Clean with deodorizer spray and a broom, then dry the surfaces with a towel.
   d. Clean with hot water, Lysol®, and a brush, then dry the surfaces with a towel.

7. How should stainless steel equipment be cleaned weekly?

   a. Wipe with disinfectant, shine with mineral oil, and allow to dry.
   b. Wipe with disinfectant, allow to dry, then wipe with stainless steel polish.
   c. Wash with soapy water, dry with cotton cloth, then wipe with mineral oil.
   d. Wipe with alcohol, shine with stainless steel polish, then dry with cotton cloth.

8. When preparing a treatment booth with an unattached mat, how should the sheet be secured?

   a. With folded corners
   b. With mitered corners
   c. With tucked corners
   d. With rolled corners

9. Which of the following are found on an MSDS?

   a. What the price is for the product and what physical harm it can cause
   b. What the product is made of and who to call in case of questions
   c. Who to call in case of an accident and what the brand names of the elements are
   d. Precautions to take to prevent injury and what the wholesale price is

10. The removal of dead tissue is called:

    a. Sterilization.
    b. Infection control.
    c. Debridement.
    d. Disinfection.

11. What are the two functions of whirlpool additives?

    a. To kill viruses or filter the water
    b. To cleanse the tank or increase foaming
    c. To prevent filmy water or kill viruses
    d. To control bacteria or reduce foaming

Lesson 1: Maintaining Treatment Areas

Skill Sheet

PREPARE TREATMENT BOOTH

Student Name ________________________________ Date ________________

EQUIPMENT:

1. Alcohol or cleaning solution
2. Sheet
3. Pillowcase
4. Gloves
5. Sponge
6. Supplies (as needed)

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash hands. Put on gloves.		
2. Obtain linens and supplies.		
3. For hospital beds and adjustable tables, raise bed to high position. Lower bed rails. Lower bed to flat position.		
4. Remove pillow and strip pillowcase. Place pillowcase on top of sheet. Do NOT allow linens to come into contact with your uniform.		
5. Wash and dry nonabsorbent inner cover of pillow if soiled.		
6. Place pillow on storage rack.		
7. Strip mat by rolling linens toward center. Do NOT allow linens to come into contact with your uniform.		
8. Place dirty linens in laundry. If disposable linens were used, dispose in appropriate container.		
9. Wash and dry mat if soiled.		
10. If used supplies are lying in the treatment booth, pick them up and dispose of them properly.		
11. Remove gloves and dispose in appropriate container.		
12. Wash hands.		
13. Unfold sheet on mat, full length.		

14. Attached Mat: Center sheet over treatment table. Let edges fall loosely.		
Unattached Mat: a. Center sheet over treatment table.		
b. Tuck in sheet at head of table; miter near corner.		
c. Tuck in sheet at foot of table; miter near corner.		
d. Tuck in near edge of sheet.		
e. Go to other side of table. Miter lower corner.		
f. Miter upper corner.		
g. Tuck in side.		
15. Put pillowcase on pillow. a. Grasp closed end of pillowcase.		
b. Put your other hand through the opening as if turning the case wrong side out. Turn the pillowcase over your hand that is holding the closed end.		
c. Grasp the pillow in the covered hand.		
d. Using your other hand, work the pillowcase over the pillow.		
16. Place the pillow at the head of the mat.		
17. Make sure timer and tap button are on shelf in treatment booth.		
18. Check supplies and restock as needed.		

The student has satisfactorily completed the procedure "PREPARE TREATMENT BOOTH" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

Lesson 1: Maintaining Treatment Areas

Skill Sheet

CLEAN A WHIRLPOOL OR FULL BODY TANK

Student Name ______________________ Date ____________

EQUIPMENT:

1. Whirlpool or full body tank
2. Rubber gloves and goggles
3. Cleaning agent (with MSDS)
4. Disinfectant (with MSDS)
5. Long-handled scrub brush
6. Sponge

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Gather cleaning equipment and supplies.		
2. Put on sturdy disposable gloves or reusable vinyl/rubber gloves.		
3. Drain water from the tank; any equipment used in the tank should be left in it, or returned to it, for cleaning (for example, a stretcher used to lower a person into a tank).		
4. Scrub the inside of the tank, the agitator, and other equipment with disinfectant and a brush.		
5. Refill the tank with hot water (at least 115°F) from the tap.		
6. Add disinfectant as directed for the size of the tank.		
7. Turn on the agitator and scrub the inside walls of the tank, the agitator, and any other equipment with a long-handled brush for five minutes.		
8. Turn off the agitator and scrub the inside of the intake tubes.		
9. Drain and refill with hot water from the tap; let stand at least five minutes.		
10. Rinse all parts of the tank and equipment that are above the water line using the long-handled brush.		
11. Drain the tank and remove equipment.		

12. Go over all surfaces of the tank and inside the agitator tubes with disinfectant on a sponge.		
13. Wipe the outside surfaces of the tank.		
14. Let the tank dry.		
15. Fill the tank for the next patient, if appropriate.		
16. Return equipment and supplies to appropriate area. Properly dispose of used supplies.		
17. Wash hands.		

The student has satisfactorily completed the procedure "CLEAN A WHIRLPOOL OR FULL BODY TANK" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion)

Date

Written Evaluation

Circle the letter that corresponds to the best answer.

1. A routine responsibility of the physical therapist aide in answering the telephone in the physical therapy clinic is to:

   a. Schedule appointments and treatment programs.
   b. Tell the physician how a patient is doing today.
   c. Tell a patient's neighbor how the patient is doing.
   d. Get the person the call is for or take a message.

2. If a person comes into the physical therapy clinic and the secretary is out, the aide should:

   a. Welcome the person and find out what he or she needs.
   b. Tell the patient to sit down and wait for the secretary to return.
   c. Complain because the secretary is out.
   d. Go find a therapist immediately.

3. If a caller becomes upset on the telephone:

   a. Terminate the call by hanging up.
   b. Tell the person to settle down.
   c. Put the telephone down and get a therapist.
   d. Be patient and try to calm the person.

4. When the physical therapist aide takes a call and must put the caller on hold, the wait should be no longer than:

   a. One minute.
   b. Two minutes.
   c. Five minutes.
   d. Ten minutes.

5. When taking a telephone message, it is important to:

   a. Repeat a telephone number back to the caller.
   b. Ask the spelling of common names.
   c. Write very long and detailed messages.
   d. Use plain pieces of blank paper to write on.

6. Which of the following is an appropriate greeting to use in the physical therapy clinic?

   a. "Howdy, Bert, what do ya need this morning?"
   b. "Yo, Sam, I'll tell the therapist you're here, man."
   c. "Good morning, Mrs. Allen, how may I help you?"
   d. "Hey, Tonya, how can I help you out today?"

7. If a problem should arise between coworkers in the physical therapy clinic, which of the following would be the best course of action?

   a. To make secret reports about your coworkers to the supervisor.
   b. To never give in to your coworkers unless you have your way.
   c. To approach the situation in a reasonable, mature manner.
   d. To demand apologies from coworkers whom you feel wronged you.

Certificate of Achievement

This is to certify that

____

Achieved the Competencies
as Acknowledged for
Physical Therapist Aide
And is Therefore Recognized

This __________ Day of __________, 19 ____

____
Instructor

____
Administrator

Physical Therapist Aide Competency Record

Name and Address: ____

Directions: Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

Rating Scale:
3 Mastered - can work independently with no supervision
2 Requires Supervision - can perform job completely with limited supervision
1 Not Mastered - requires instruction and close supervision
N No Exposure - no experience or knowledge in this area

(IBM) 8-96

NOTE: The code in parentheses is the competency identification number used in computerized management systems.

☐ Successfully completed the Health Care Assistant Core Competencies

3	2	1	N	
				A. Explore the Field of Physical Therapy
				1. Identify physical therapy team members. (A001)
				2. Identify common employment sites and settings. (A002)
				3. Identify common conditions and impairments. (A003)
				4. Follow chain of command. (A004)
				Other ______________________________
				______________________________

3	2	1	N	
				B. Basic Patient Care
				1. Exhibit sensitivity to patients' pain and loss. (B001)
				2. Maintain patient confidentiality. (B002)
				3. Maintain patient privacy. (B003)
				4. Differentiate between ethical and unethical decisions and legal and illegal actions. (B004)
				5. Respond appropriately to physical therapy patients who have sensory deficits. (B005)
				6. Follow Body Substance Precautions. (B006)
				7. Manage lines, tubes, and bags. (B007)
				8. Reposition a displaced nasal cannula or oxygen mask. (B008)
				9. Assist patient with toileting including bedpan and urinal. (B009)
				10. Assist patient to dress and undress. (B010)
				Other ______________________________
				______________________________

3	2	1	N	
				C. Patient Mobility
				1. Identify good body mechanics. (C001)
				2. Supervise independent transfer. (C002)
				3. Perform stand and pivot transfers--patient assisted and unassisted. (C003)
				4. Perform swing transfer. (C004)
				5. Perform sliding board transfer. (C005)
				6. Perform sliding transfer from gurney to treatment table. (C006)
				7. Perform three-person carry transfer. (C007)
				8. Perform two-person sitting transfer. (C008)
				9. Perform mechanical lift transfer. (C009)
				Other ______________________________
				______________________________

3	2	1	N	
				D. Assisting with Treatment
				1. Move/assist patients to the head of the mat [one- and two-person]. (D001)
				2. Move patient to one side of mat. (D002)
				3. Place patient in supine position for treatment. (D003)
				4. Place patient in side-lying position for treatment. (D004)
				5. Place patient in prone position for treatment. (D005)
				6. Drape upper extremity for treatment--sitting position. (D006)
				7. Drape upper extremity for treatment--supine position. (D007)
				8. Drape lower extremity for treatment. (D008)
				9. Drape for back treatment. (D009)
				10. Assist with hot pack treatments. (D010)
				11. Assist with ultrasound treatments. (D011)
				12. Assist with paraffin bath. (D012)
				13. Assist with diathermy. (D013)
				14. Assist with Fluidotherapy™. (D014)
				15. Assist with ice pack treatments. (D015)

3	2	1	N	
				D. Assisting with Treatment continued
				16. Assist with ice massage. (D016)
				17. Assist with hydrotherapy. (D017)
				18. Assist with electrotherapy. (D018)
				19. Assist with cervical traction. (D019)
				20. Assist with lumbar traction. (D020)
				21. Set up and take down equipment used in exercise. (D021)
				Other ______________________________
				______________________________

3	2	1	N	
				E. ROM Exercise and Ambulation
				1. Complete upper extremity ROM exercises. (E001)
				2. Complete lower extremity ROM exercises. (E002)
				3. Ambulate patient using walker. (E003)
				4. Ambulate patient using crutches. (E004)
				5. Ambulate patient up and down stairs with crutches. (E005)
				6. Ambulate patient with cane. (E006)
				7. Ambulate patient using gait belt. (E007)
				Other ______________________________
				______________________________

3	2	1	N	
				F. Maintaining Treatment Areas
				1. Check linens and supplies and restock as needed. (F001)
				2. Follow precautions when using chemicals. (F002)
				3. Prepare treatment booth. (F003)
				4. Return equipment to storage area. (F004)
				5. Perform routine cleaning and maintance of equipment. (F005)
				6. Clean whirlpool or full body tank. (F006)
				Other ______________________________
				______________________________

3	2	1	N	
				G. Office Communication
				1. Identify effective telephone techniques. (G001)
				2. Fill out message slip. (G002)
				3. Greet patients and visitors. (G003)
				4. Communicate with the health team members. (G004)
				Other ______________________________
				______________________________

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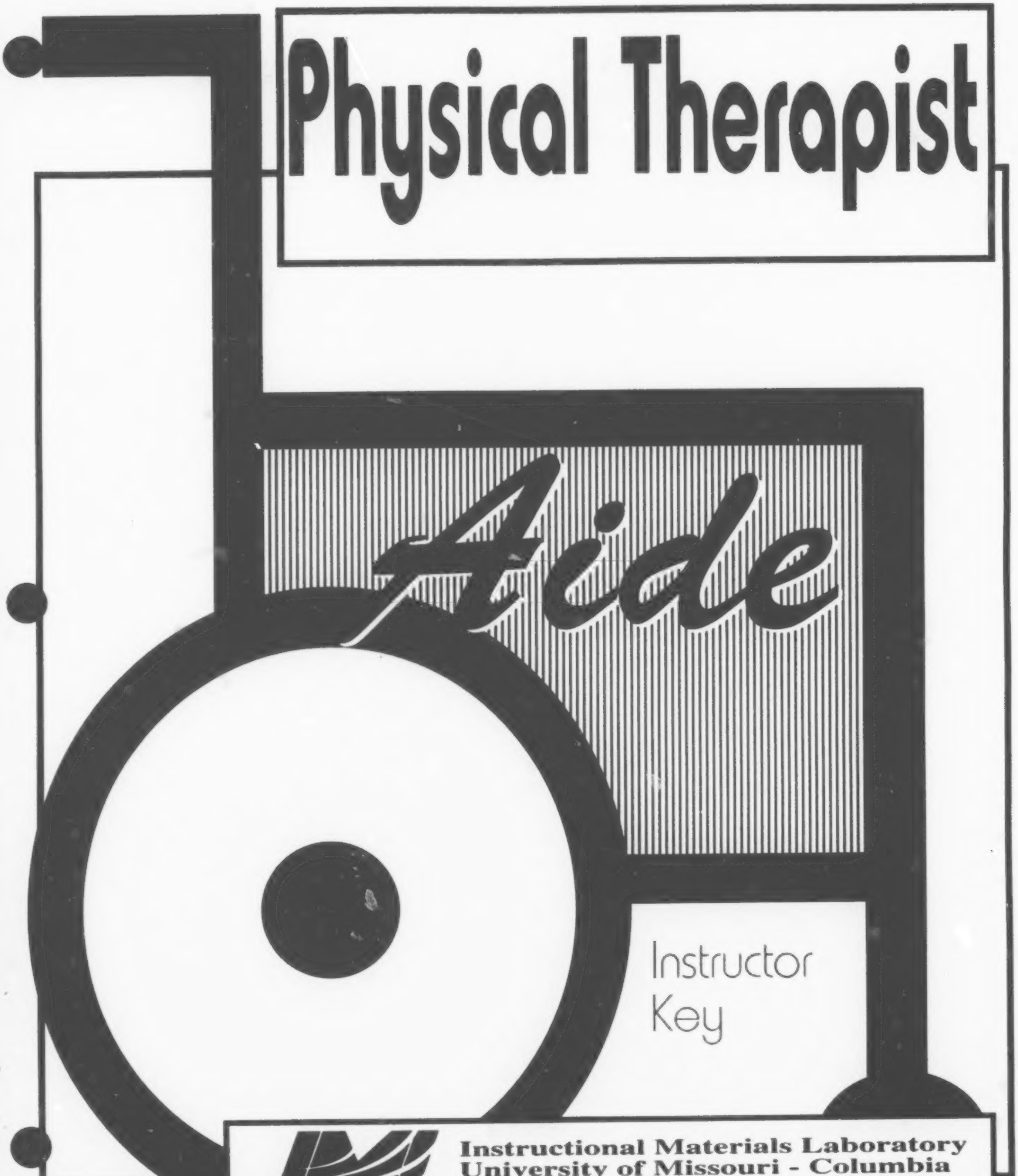

Physical Therapist Aide

Instructor Key

Instructional Materials Laboratory
University of Missouri - Columbia
Missouri Department of Elementary and Secondary Education

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Notice: The information presented in this publication reflects current medical standards of care to the best of our knowledge. Of course, readers are advised to be aware of local protocols, the needs and circumstances of individual cases, and their responsibility to stay abreast of emerging knowledge and clinical procedures. The authors, editors, and publishers disclaim any responsibility for improper treatment resulting from the clinical procedures outlined in this publication, for misinterpretation of the information presented, and for any undetected inaccuracies within the text.

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Physical Therapist Aide

Instructor Key

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Instructional Strategies

This *Physical Therapist Aide* Instructor's Key is designed to be used with the *Physical Therapist Aide* Student Manual. It provides answers to the activity sheets and unit evaluations. The revised content was developed with input from secondary health occupations education instructors, post-secondary physical therapy instructors, physical therapists, physical therapist assistants, and personnel from the Missouri Department of Elementary and Secondary Education and the Instructional Materials Laboratory at the University of Missouri-Columbia.

The self-instructional format provides health occupations education instructors the opportunity to address the needs of students whose health career interests are outside the nursing field. Following completion of the Health Care Assistant Core Competencies, a student interested in pursuing a career in the physical therapy field can achieve physical therapy-specific competencies through this curriculum. Successful completion prepares the student for an entry-level position as a physical therapist aide as well as a solid knowledge and skill base to continue education in a physical therapy career.

The *Physical Therapist Aide* curriculum is primarily designed to be used independently by students who are in secondary health occupations programs or by individuals receiving on-the-job training in a physical therapy department. Instructors should define parameters for the individualized instruction, oversee the knowledge component of instruction (including the Written Unit Evaluations), and identify a clinical site and a clinical supervisor. The clinical supervisor should be responsible for supervising the student while at the clinical site, providing skill training, and evaluating mastery of skills.

Since mastery of the information and skills will be evaluated using the Written Unit Evaluations (pink) and the Skill Sheets (pink), it is recommended that these pages be removed before the manual is given to the student. These pages are located together at the end of the manual.

A Physical Therapist Aide Competency Record Sheet and a Physical Therapist Aide Certificate of Achievement have also been included at the end of this manual. These could be removed and filed with the evaluation instruments.

The student manual is divided into seven units: Explore the Field of Physical Therapy, Basic Patient Care, Patient Mobility, Assisting with Treatment, ROM Exercise and Ambulation, Maintaining Treatment Areas, and Office Communication. Units are further divided into lessons, which contain lesson objectives, key terms, content information, illustrations, activity sheets, and clinical/laboratory activities as appropriate for the content. Activity Sheets are designed to assist the learner in mastering the information in each lesson. The Clinical/Laboratory Activity Sheets should be reviewed or discussed with the instructor or clinical supervisor upon completion. The Activity Sheets and Clinical/Laboratory Activity Sheets may or may not be graded depending on individual student's needs and instructor's preference.

Each unit has a written evaluation, which should be administered after all lessons in the unit are studied. A score of at least 80 percent indicates that the student has satisfactorily completed the unit and may proceed to the next unit. Students should review any lessons or materials that correspond to missed evaluation questions because all information presented is important for success as a physical therapist aide. Skill Sheets provide a record for mastery of the steps of procedure for each skill. The student should practice the skills outlined in the lessons before requesting evaluation of the skills. When evaluating mastery of the skills, the clinical supervisor can determine that mastery is obtained when he or she feels confident in the student's ability to perform the skill without direct supervision.

A Unit Checklist, located at the end of each unit, provides a method for keeping track of Activity Sheets, Clinical/Laboratory Activity Sheets, Skill Sheets, and Written Unit Evaluations to be completed in the unit.

In addition to being utilized in the secondary health occupations program to prepare physical therapist aides, the *Physical Therapist Aide* curriculum could be used in other ways as well:

- Health occupations education instructors may choose some units of instruction as an adjunct to teaching career opportunities in physical therapy.

- Physical therapy departments and clinical training sites may use all or part of the curriculum in training students or new staff members.

Answers to Activity Sheets and Written Evaluations

NOTE: Answers are not provided for Clinical/Laboratory Activities. Review or discuss these activities with students.

Unit I: Explore the Field of Physical Therapy

Lesson 1: Explore the Field of Physical Therapy - Activity Sheet

1. a. World War I
   b. Polio epidemics

2. Mary McMillan

3. American Physical Therapy Association

4. a. General hospitals
   b. Rehabilitation hospitals
   c. Outpatient clinics
   d. Long-term care facilities
   e. Patients' homes

5. a. High school diploma
   b. 2 years college
   c. 4 to 6 years college

6. How the facility is organized, who answers to whom, who is in charge

7. Patient (and family)

8. Any six of the following:

   - Cerebral palsy
   - Down's syndrome
   - Cystic fibrosis
   - Burns
   - Fractures
   - Sprains
   - Strains
   - Head injuries
   - Spinal injuries
   - Arthritis
   - AIDS
   - Lower back pain
   - Heart disease
   - Lung disease
   - Total joint replacements
   - Stroke
   - Parkinson's disease

9. The physical therapist assistant carries out much of the direct patient care. The physical therapist aide is responsible for putting away equipment, restocking supplies, and keeping the physical therapy department in order. The aide may help the patient prepare for

treatment, may assist the patient in performing an activity, and may assist the therapist or assistant in treating patients.

10. Any three of the following:

    - Evaluates and develops treatment plans
    - Determines equipment needs
    - Prepares patient discharge plans
    - Department administrator

11. Physical therapist or physical therapist assistant

12. Answers will vary.

Unit I: Explore the Field of Physical Therapy - Written Unit Evaluation

1. a
2. b
3. d
4. c
5. c
6. b
7. c
8. b
9. d
10. a
11. c
12. c
13. a
14. a
15. c

Unit II: Basic Patient Care

Lesson 1: Techniques for Interacting with Patients - Activity Sheet

1. a. Denial that the patient is ill
   b. Depression
   c. Bargaining with caregiver to get better
   d. Acceptance of the illness and calmness

2. Empathy is trying to understand how the patient is feeling and providing care that is proper under the circumstances. Sympathy is feeling sorry for the patient. The physical therapist aide should use empathy because sympathy can get in the way of good care because the patient's problems can make the caregiver feel so bad that he or she is unable to help the patient.

3. The main goal of physical therapy is to help patients regain the maximum amount of ability to do things for themselves.

4. Patient confidentiality

5. To re-cover the patient

6. Use a toy to demonstrate what is going to happen to the patient.

7. Any three of the following:

   - Respect the rights and dignity of all individuals.
   - Provide services within the limits of the law.
   - Provide any services under the supervision of a physical therapist.
   - Promote high standards and put the patient first.
   - Protect the public and the profession from unethical, incompetent, and illegal acts.

8. Any three of the following:

   - It enhances self-respect.
   - It develops personal integrity and integrity in relations.
   - It builds genuine confidence in self and others.
   - It maintains confidentiality and exhibits respect.

9. Any three of the following:

   - It brings harm to others.
   - It causes an illegal action.
   - People are exploited or belittled.
   - People are treated as inhuman objects.

10. Any three of the following:

    - Discussing patient treatment outside the department.
    - Promising "miraculous results" in a newspaper ad campaign.
    - Degrading other medical personnel's work or treatment plan.
    - Discussing other health care provider's fees.

11. Any three of the following:

    - Performing activities that require a state license without a license.
    - Changing dates or entries in patient records and files.
    - Causing injury to a patient because of negligence.
    - Taking disposable gloves home for personal use.
    - Using illegal drugs.

12. A motor deficit results from an injury to the nervous system, causing loss of movement. This patient's muscles do not work properly.

13. a. Vision loss
    b. Hearing loss
    c. Loss of touch
    d. Loss of taste
    e. Loss of smell

14. Students should review their answers with their clinical supervisors. The following are possible responses.

    Scenario A:
    There are several ways the physical therapist aide might respond, depending upon your relationship to the individuals who are asking the question. They probably need a gentle reminder that this is not the sort of thing to be talking about on an elevator, and in fact, should not be discussed at all. Part of the difficulty is that when a well-known or public figure is hospitalized, people feel it is alright to discuss the situation openly. However, everyone has the right to privacy. Discussions such as these are how rumors begin.

    Scenario B:
    You might say, "It is against our agency policy to talk about other patients." You might add, "Is there something about that person that is concerning you?" If the patient who asks seems distressed or particularly curious, mention it to your supervisor.

    Scenario C:
    For the sake of the patient, it would be a good idea to try to defuse the situation by saying something like, "Assistant Jones certainly seems upset with the doctor, perhaps he is having a difficult day." Then, report the situation to the patient's therapist so that he or she can put the patient at ease concerning the physician directing treatment and answer any questions she has.

Supplemental Activity

Have students role-play a patient confidentiality situation after viewing "Well, Shut My Mouth!" video. This video is available for free loan through the Missouri Vocational Resource Center (MVRC), 8 London Hall, Columbia, MO 65211.

Lesson 2: Lines, Tubes, Bags, and Wound Dressings - Activity Sheet

1. a. Intravenous line
   b. Nasogastric tube
   c. Gastrostomy tube
   d. Urinary catheter
   e. Nasal cannula

2. a. IV fluid container
   b. Small valve that controls the drip
   c. Drip chamber
   d. IV tube
   e. Needle
   f. IV pole

3. Notify the patient's nurse, case manager, or supervisor.

4. Any two of the following:

   - IV infiltration occurs.
   - The IV alarm sounds.
   - The dressing around the IV line is wet.

5. Elevating the collection bag too high may cause urine to flow back into the patient's body.

6. To prevent the spread of infectious diseases

7. Because health care workers are exposed to many types of communicable diseases and many of these diseases can be carried and transmitted without visible signs or symptoms, following these precautions can better protect workers from diseases in all body fluids and substances, not just blood.

8. Replace it carefully.

9. Urinary catheter, balloon, tube, and collection bag

10. Above the level of the patient's heart

11. Notify supervisor or nurse.

12. Clean the area using Body Substance Precautions and notify a supervisor or nurse.

13. If the urinary catheter is pulled out of the patient's body, it causes pain and can injure the patient when the balloon device is pulled through the urethra.

Lesson 3: Assisting the Patient with Comfort and Self Care - Activity Sheet

1. Shoes with nonskid rubber soles

2. The weak arm

3. Any three of the following:

   - A shoe spoon may be required.
   - Do not put on shoes without socks or stockings.
   - Shake out shoes to be sure there is no debris in them.
   - For ambulation, shoes should have nonskid rubber soles.
   - Inspect the patient's feet for red spots or abrasions. Report any abnormal skin areas to the therapist.

4. A gown with snaps or Velcro™ closures on the sides and underarms

5. The fracture bedpan is more comfortable for the patient because the mat does not have the amount of "give" found in a hospital bed.

6. The wide rim should face toward the patient's head.

7. The narrow end should face toward the patient's head.

8. The patient's therapist

9. a. **Bridging technique**
   b. **Rolling technique**

10. Any two of the following:

    - Rinse and bag the urinal.
    - Send the urinal to the appropriate department for cleaning and sterilization.
    - Remove gloves and dispose of in appropriate container.
    - Wash hands.
    - Give patient a clean, wet washcloth to wash his hands.
    - Report anything unusual to the therapist.

Unit II: Basic Patient Care - Written Evaluation

1. c
2. a
3. d
4. b
5. d
6. c
7. a
8. d
9. b
10. a
11. c
12. d
13. a
14. b
15. b
16. b
17. a
18. d
19. d
20. b
21. c
22. c
23. c
24. b
25. a
26. d
27. b
28. a
29. a
30. c
31. a

Unit III: Patient Mobility

Lesson 1: Safety - Activity Sheet

1. a. Place the feet apart to provide a wide base of support.
   b. Hold the load close to your body.
   c. Keep the back straight.
   d. Tighten lower back and abdominal muscles.
   e. Bend hips and knees and lift with the legs.
   f. Avoid twisting the spine during the lift, pivoting the feet instead.
   g. Lift in a smooth motion.
   h. Avoid lifting items overhead.

2. Use a count followed by a command so everyone moves smoothly and efficiently together. Have one person give the commands.

3. They are used to protect the patient, to protect the caregiver, and to save energy which prevents fatigue.

4. - Plan ahead.
   - Decide if you can manage alone or need assistance.

- Have all the equipment you need.
- Make all preparations before you do the actual lift.
- Tell the patient what you are going to do.
- Clear the area of unnecessary objects.
- Check the floor to see how slick it is; be sure it is dry.
- Block furniture or equipment that is likely to move.
- Be sure that equipment does not move by locking wheels on wheelchairs, gurneys, etc.

5. A wheelchair seat belt is placed where a patient can unfasten it, while a restraint is a device a patient cannot unfasten or remove.

6. a. Back the wheelchair into and out of an elevator whenever possible.

   b. To go up a curb, approach the curb with the front of the wheelchair, tip the wheelchair back slightly to raise the front wheels, and lift as you push the back wheels up the curb.

   c. To go down the curb, back the wheelchair, gently lower the large wheels first, rotate the chair a quarter turn, and lower the small front wheels.

7. Footplates, leg rests, armrests, headrests, backrests, brake extensions, and food trays

8. Push a gurney into an elevator with the patient's feet leading. Back the gurney out with the patient's head first. Always stand at the patient's head.

9. a. Armrest
   b. Armrest release
   c. Seat belt
   d. Leg rest release
   e. Leg rest
   f. Footplate
   g. Brake
   h. Wheel
   i. Hand rim
   j. Headrest
   k. Joystick
   l. Cushions
   m. Power switch
   n. Battery box
   o. Brake extension

Lesson 2: Transfers - Activity Sheet

1. Independent transfer

2. To give the commands

3. To assist in moving, transferring, or ambulating a patient

4. Dependent

5. Passive-assisted

6. A second sheet placed under the patient's body to help change the patient's position on the bed sheet

7. If the near armrest is not removed, the dependent patient might be bruised or might fall while attempting to get up and over the armrest.

Unit III: Patient Mobility - Written Evaluation

1. c
2. d
3. a
4. d
5. d
6. c
7. b
8. d
9. d
10. b
11. c
12. a
13. b
14. c
15. c

Unit IV: Assisting with Treatment

Lesson 1: Positioning - Activity Sheet

1. Physical therapist or assistant

2. Under the head and between the legs

3. Under the ankles, at the head or chest, under the abdomen

4. In front of the body

5. Any five of the following:

   - Rolled towels
   - Rolled blankets
   - Foam-filled bolsters
   - Foam-filled rolls
   - Velcro™ straps
   - Sandbags
   - Slings
   - Pillows

6. a. If the patient is small or needs little assistance, the aide may be able to put his or her arms under the patient's shoulders and knees and slide the patient.

   b. If the patient is large or totally dependent, two caregivers should use a draw sheet to move the patient.

7. a. Supine
   b. Prone
   c. Side-lying

Lesson 2: Draping - Activity Sheet

1. Any two of the following:

   - To uncover the area to be treated
   - To maintain the patient's privacy
   - To keep the patient warm
   - To help keep clothing clean

2. Any three of the following:

   - Sheets
   - Terry cloth towels
   - Lightweight blankets
   - Hospital gowns
   - Disposable garments
   - Disposable sheets

3. To keep the clothes clean and free of wrinkles and to allow the patient freedom of movement

4. Tuck the end of the drape in under the patient's waist or hip.

5. Pull the drape into the axilla (armpit) snugly.

6. Prone

Lesson 3: Assisting with Treatment - Activity Sheet

1. a. Hot packs
   b. Paraffin baths
   c. Diathermy
   d. Ultrasound
   e. Fluidotherapy™

2. a. Ice packs
   b. Ice bags
   c. Ice massages

3. Any four of the following:

   - Treadmills
   - Free weights (e.g., sandbags and dumbbells)
   - Wall and overhead pulleys
   - Shoulder wheel
   - Stall bars
   - Traction machines
   - Exercise bicycles
   - Balance and climbing machines

4. A call or tap bell

5. 130°F

6. Ground corncobs

7. a. Cervical traction - neck
   b. Lumbar traction - lower back

8. 96°F - 105°F

Unit IV: Assisting with Treatment - Written Unit Evaluation

1. c
2. d
3. a
4. b
5. d
6. a
7. c
8. d
9. b
10. c
11. a
12. b
13. b
14. c
15. c
16. d
17. c
18. a

Unit V: ROM Exercise and Ambulation

Lesson 1: Range of Motion Exercises - Activity Sheet

1. It is important for patients to maintain or improve ROM because joint motion is necessary for walking, eating, and all other activities involving body movement. Without movement, stiff joints and weak muscles occur, and the patient's recovery period may be longer as a result.

2. a. Give patients a choice (as to where in the exercise series they would like you to start).
   b. Ask the patient if your hand grip is comfortable.
   c. Your grip should be light but firm, supporting as many joints as possible.
   d. Imagine that you are the patient.
   e. Use good body mechanics.
   f. Find out the recommended number of repetitions.

3. a. Flexion/extension; abduction/adduction; lateral/medial rotation
   b. Flexion/extension; supination/pronation
   c. Flexion/extension; abduction/adduction
   d. Flexion/extension; abduction/adduction; thumb opposition
   e. Flexion/extension
   f. Flexion/extension; abduction/adduction; lateral/medial rotation
   g. Dorsiflexion/plantar flexion; inversion/eversion
   h. Flexion/extension; abduction/adduction

4. In passive ROM exercises, the patient is relaxed and the caregiver moves the joints through the exercises without help from the patient. In active ROM exercises, the caregiver only provides the patient with oral instructions for the exercises.

5. Imagine that you are the patient. Examine how far your own joints move to better understand movement that is normal and comfortable. Answers will vary.

6. The aide applies resistance to make the patient work harder.

Lesson 2: Ambulation - Activity Sheet

1. a. Lock the wheels on the wheelchair.
   b. Put a gait belt on the patient.
   c. Put shoes or good quality house slippers on the patient, making sure they have nonskid soles.
   d. Have sufficient personnel available to assist the patient if there are difficulties.
   e. Observe the patient carefully to watch for signs of excessive fatigue or faintness.
   f. Always have a plan for sitting the patient down. Have a chair nearby in case the patient cannot make it back to the wheelchair.
   g. If contact assistance is necessary, stay close to the patient with one hand on the gait belt and the other on the patient's shoulder.

2. a. Nonweightbearing - Able to place no weight on an extremity
   b. Toe or touch weight bearing - Able to touch the toe or sole of foot lightly to the floor for balance
   c. Partial weight bearing - Able to place a portion of the body weight on an extremity; often expressed as a percentage of body weight
   d. Full weight bearing - Able to place entire weight of the body on an extremity--usually a leg

3. Cane

4. a. Walkers
   b. Crutches

5. a. Parallel bars
   b. Tilt table

6. Because the patient can progress from nonweightbearing to full weight bearing ambulation using the three-point gait in crutch ambulation

7. The right hand

8. On the affected side

9. Unaffected leg

10. The affected foot

11. a. On the patient's affected side
    b. On the patient's weak side
    c. On the side of the patient's affected leg

12. The amount of assistance required by a patient who is very weak.

13. When the patient needs to practice walking to increase strength and endurance and is able to do so without a device

Unit V: ROM Exercise and Ambulation - Written Unit Evaluation

1. d
2. a
3. d
4. c
5. b
6. a
7. c
8. d
9. a
10. a
11. a
12. c
13. b
14. d
15. c
16. b
17. d

Unit VI: Maintaining Treatment Areas

Lesson 1: Maintaining Treatment Areas - Activity Sheet

1. Any three of the following:

    - Tape measures
    - Reflex hammers
    - Gauges
    - Dynamometers
    - Goniometers
    - Sphygmomanometers
    - Stethoscopes

2. When the treatment table has an unattached mat

3. Any three of the following:

    - Tissues
    - Emesis basins
    - Gloves
    - Paper towels
    - Paper cups
    - Paper gowns
    - Paper slippers

4. a. So that it is easily located
   b. So that it is out of the way

5. You might think the clinic was unsanitary or unsafe, that the employees were unprofessional or did not care, or that you would not receive good quality care. Answers will vary.

6. Two or three days

7. Read their service manuals.

8. a. To control bacteria
   b. To reduce foaming

9. They regularly take water samples from the hydrotherapy equipment.

10. Bacteria and viruses from one patient must not be passed to the next patient because the whirlpool or tank was inadequately clean.

11. Store whirlpool additives apart from cleaning agents.

12. a. What a product is made of
    b. What physical harm it can cause
    c. Precautions to take to prevent injury
    d. What steps to take in case of accident
    e. Who to call in case of questions or an accident

13. This reduces the number of organisms on the tank surfaces, also reducing the risk of passing bacteria and viruses from one patient to the next because of inadequate cleaning.

Unit VI: Maintain Treatment Areas - Written Evaluation

1. c
2. a
3. c
4. d
5. c
6. a
7. b
8. b
9. b
10. c
11. d

Unit VII: Office Communication

Lesson 1: Office Communication - Activity Sheet

1. a. Answers will vary.
   b. Be polite and remain calm.
   c. Answers will vary.
   d. Answers will vary.

Scenario One

TO: Mary Sanders, PT

DATE: Today's date TIME: Current time

BY: Student

☑ Please return call ☑ Telephoned

☐ Will call again ☐ Returned your call

Name of caller: Dr. Brady

of: Community Hospital

Phone: 123-555-5432 (page)

Message: Page him by telephone this afternoon to discuss discharge plans for Mr. Allen, a stroke patient.

Scenario Two

TO: Jerry Black, PT

DATE: Today's date TIME: Current time

BY: Student

☐ Please return call ☑ Telephoned

☐ Will call again ☐ Returned your call

Name of caller: Mrs. Grimes

of: (patient)

Phone: on file

Message: She's canceling her appointment this afternoon because her headache is worse. She does not want you to call her back. She seemed upset. When I asked for her number, she said, 'If you can't find it, it's your problem.' and hung up on me.

2. "Physical therapy, this is ..." Answers will vary.

3. "Caller, would you please hold for about two minutes while I check with the physical therapist?" Wait until the caller agrees to be on hold, then put him or her on hold. Answers will vary.

4. Switching numbers and writing them down incorrectly can make it impossible to return a call.

5. Using poor grammar leaves a poor impression of the facility on the caller.

6. "Hello, how may I help you?" Answers will vary.

7. Answers will vary.

Unit VII: Office Communication - Written Unit Evaluation

1. d
2. a
3. d
4. b
5. a
6. c
7. c

Name: ______________________________

Physical Therapist Aide 50-1140-C

Directions: Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

Rating Scale:
3 Mastered - can work independently with no supervision
2 Requires Supervision - can perform job completely with limited supervision
1 Not Mastered - requires instruction and close supervision
N No Exposure - no experience or knowledge in this area

(IBM) 4-96

NOTE: The code in parentheses is the competency identification number used in computerized management systems.

☐ Successfully completed the Health Care Assistant Core Competencies

3	2	1	N	
				A. Explore the Field of Physical Therapy
				1. Identify physical therapy team members. (A001)
				2. Identify common employment sites and settings. (A002)
				3. Identify common conditions and impairments. (A003)
				4. Follow chain of command. (A004)
				Other ______________________________
				______________________________

3	2	1	N	
				B. Basic Patient Care
				1. Exhibit sensitivity to patients' pain and loss. (B001)
				2. Maintain patient confidentiality. (B002)
				3. Maintain patient privacy. (B003)
				4. Differentiate between ethical and unethical decisions and legal and illegal actions. (B004)
				5. Respond appropriately to physical therapy patients who have sensory deficits. (B005)
				6. Follow Body Substance Precautions. (B006)
				7. Manage lines, tubes, and bags. (B007)
				8. Reposition a displaced nasal cannula or oxygen mask. (B008)
				9. Assist patient with toileting including bedpan and urinal. (B009)
				10. Assist patient to dress and undress. (B010)
				Other ______________________________
				______________________________

3	2	1	N	
				C. Patient Mobility
				1. Identify good body mechanics. (C001)
				2. Supervise independent transfer. (C002)
				3. Perform stand and pivot transfers--patient assisted and unassisted. (C003)
				4. Perform swing transfer. (C004)
				5. Perform sliding board transfer. (C005)
				6. Perform sliding transfer from gurney to treatment table. (C006)
				7. Perform three-person carry transfer. (C007)
				8. Perform two-person sitting transfer. (C008)
				9. Perform mechanical lift transfer. (C009)
				Other ______________________________
				______________________________

3	2	1	N	
				D. Assisting with Treatment
				1. Move/assist patients to the head of the mat [one- and two-person] (D001)
				2. Move patient to one side of mat. (D002)
				3. Place patient in supine position for treatment. (D003)
				4. Place patient in side-lying position for treatment. (D004)
				5. Place patient in prone position for treatment. (D005)
				6. Drape upper extremity for treatment--sitting position. (D006)
				7. Drape upper extremity for treatment--supine position. (D007)
				8. Drape lower extremity for treatment. (D008)
				9. Drape for back treatment. (D009)
				10. Assist with hot pack treatments. (D010)
				11. Assist with ultrasound treatments. (D011)
				12. Assist with paraffin bath. (D012)
				13. Assist with diathermy. (D013)
				14. Assist with Fluidotherapy™. (D014)
				15. Assist with ice pack treatments. (D015)

3	2	1	N	
				D. Assisting with Treatment continued
				16. Assist with ice massage. (D016)
				17. Assist with hydrotherapy. (D017)
				18. Assist with electrotherapy. (D018)
				19. Assist with cervical traction. (D019)
				20. Assist with lumbar traction. (D020)
				21. Set up and take down equipment used in exercise. (D021)
				Other ________________________________
				________________________________

3	2	1	N	
				E. ROM Exercise and Ambulation
				1. Complete upper extremity ROM exercises. (E001)
				2. Complete lower extremity ROM exercises. (E002)
				3. Ambulate patient using walker. (E003)
				4. Ambulate patient using crutches. (E004)
				5. Ambulate patient up and down stairs with crutches. (E005)
				6. Ambulate patient with cane. (E006)
				7. Ambulate patient using gait belt. (E007)
				Other ________________________________
				________________________________

3	2	1	N	
				F. Maintaining Treatment Areas
				1. Check linens and supplies and restock as needed. (F001)
				2. Follow precautions when using chemicals. (F002)
				3. Prepare treatment booth. (F003)
				4. Return equipment to storage area. (F004)
				5. Perform routine cleaning and maintance of equipment. (F005)
				6. Clean whirlpool or full body tank. (F006)
				Other ________________________________
				________________________________

3	2	1	N	
				G. Office Communication
				1. Identify effective telephone techniques. (G001)
				2. Fill out message slip. (G002)
				3. Greet patients and visitors. (G003)
				4. Communicate with the health team members. (G004)
				Other ________________________________
				________________________________

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